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WAR IN ANCIENT INDIA

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WAR IN ANCIENT INDIA

BY

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University of Madras

WITH A FOREWORD

BY

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FOREWORD

I deem it a privilege to be given the opportunity of writing a foreword to this excellent publication, *War in Ancient India*, at the request of the author, Mr. V. R. Ramachandra Dikshitar. Mr. Dikshitar's works have attracted the notice of scholars, both in the East and the West, and some of his classics like the *Silappadikaram*, have justly won for him wide appreciation. In bringing out this monumental work on War in Ancient India, at this particular juncture, Mr. Dikshitar has placed historians, more particularly Indian historians, under a deep debt of gratitude.

War is as old as the human race, and despite pious resolutions and possible prophylactic measures, it threatens to repeat itself at intervals as long as the human race lasts! Each century has witnessed a war more grim and devastating in its effect than the last, and despite the so-called march of civilization, atrocities are being perpetrated in modern times which would make the warriors of old turn in their graves.

It is refreshing to note how in ancient times at least, the laws of war were designed to bring out the best and not the worst of human traits. Chivalry, individual heroism, qualities of mercy and nobility of outlook even in the grimmest of struggles were not unknown to the soldiers of ancient India. Thus among the laws of war, we find that (1) a warrior in armour must not fight with

one not so clad (2) one should fight only one enemy and cease fighting if the opponent is disabled (3) aged men, women and children, the retreating, or one who held a straw in his lips as a sign of unconditional surrender should not be killed. It is of topical interest to note that one of the laws enjoins the army to leave the fruit and flower gardens, temples and other places of public worship unmolested.

The chapters dealing with the Departments of Army, their respective duties, the weapons used in ancient warfare and strategy and tactics in war have been presented in a masterly way and give the reader a realistic conception of how wars were carried on in ancient India. No less interesting is the chapter on Diplomacy and War although one may not be inclined to agree with the ethics underlying some of these diplomacies. But perhaps state-craft can never be freed from such unfortunate trends, and one may console oneself with the thought that it is not the soldiers who are responsible for such state-craft in all ages.

This is a foreword and not a critical review, which should be left to competent scholars. To the lay mind, the theme and the method of exposition are so interesting that the book furnishes entertaining reading. It is gratifying to note that the author has come to the same conclusion which has been forced on most thinking men, that war cannot be eradicated, but should be ennobled. And this can be done only if men of good will foregather, if men forget the pride of race and birth which history

unfortunately tries indirectly to preach, if men apply their minds honestly to the task of the regeneration of mankind and if humanity adheres to the fundamentals of all religions and strives to foster the spirit of brotherhood. In the words of the author ' Let us think and act not in terms of nationalism but in terms of internationalism '. And by such unselfish conduct even the most self-centered may feel ultimately that he ensures his own happiness and that of his narrow clan, or country much more assuredly than by means of conflicts, chaos and conflagration!

UNIVERSITY OF MADRAS, }
1st April, 1944. } A. LAKSHMANASWAMI MUDALIAR

TO
THE CHERISHED MEMORY OF
MY ELDER BROTHERS
BRAHMAŚRĪ RĀMASWĀMI DĪKSHITAR (1874-1941)
AND
BRAHMAŚRĪ NATEŚA DĪKSHITAR (1879-1940)
OF VISHNAMPET, TANJORE DISTRICT,
WHO WERE ŚRAUTINS IN THE LITERAL
SENSE OF THE TERM, AND WHO, AS
DISTINGUISHED VEDIC SCHOLARS,
FOLLOWED THEIR FORE-FATHERS BY
PERFORMING A NUMBER OF VEDIC
YAJÑAS LIKE SOMAYĀGA, CĀTURMĀSYA,
APTORYĀMA AND GARUDACAYANA.

PREFACE

The following pages are based on lectures delivered in the Annamalai University in 1934. This is the first attempt to give an almost complete exposition of the art and the science of war in Ancient India, and a consecutive account and the history of Indian military tradition. The subject matter covers the whole period from the earliest times to the end of the Vijayanagar epoch. The work has been carried through the press under heavy pressure of war times, and I claim, on that ground, the indulgence of my readers for mis-prints that may have passed uncorrected.

I offer my tribute of respect to Lt.-Col. Dewan Bahadur Dr. A. Lakshmanaswami Mudaliar, Vice-Chancellor, University of Madras, who has contributed a foreword to this book; his profound learning and vast experience are only equalled by his courtesy and readiness to afford to others advice, the soundness and value of which it would be difficult to over-rate. Nor must I omit to express my warmest gratitude to Rao Bahadur K. V. Rangaswami Aiyangar and Rao Bahadur C. S. Srinivasachari for kindly reading the proofs, and making helpful suggestions, and to the Rev. Fr. T. N. Siqueira, S.J., for reading the manuscript of the work. For the arduous task of the compilation of the Index, I owe thanks to Dr. T. V. Mahalingam, M.A., D.Litt., I also desire to thank the Madras School-book and Literature Society for the generous contribution towards this publication.

MADRAS,
5th April 1944. }

V. R. RAMACHANDRA DIKSHITAR,

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CHAPTER I

THE PSYCHOLOGICAL BACKGROUND OF WAR

INTRODUCTORY

THE history of ancient India is largely a history of Hindu culture and progress. Hindu culture has a distinct claim to a higher antiquity than Assyrian schools would claim for Sargon I and as much or even a higher antiquity than Egyptian scholars would claim for the commencement of the first dynasty of Kings. One aspect of this culture consists in India's political institutions which were almost modern. Among these we are concerned in this study only with the institutions of war. Modern warfare has developed on mechanical lines, giving less scope for the qualities of courage and individual leadership, and we doubtless see further accentuation of these traits in the present World War.¹

AMONG THE TRIBES

War is a political institution and a necessary evil. To-day we speak of a new world order and realise that the call to humanise has a precedence even over defence. In spite of this new view which implies the cultivation of international-mindedness, every country is now either at war or on a footing of war-preparedness. This means we are unable to shake off bellicosity completely.

1 See, for example, *How to Prevent War* by a number of writers and published by Victor Gollancz Ltd., London.

To the early tribes war was a holy function. Before the actual expedition, they offered sacrifices to the tribal god or goddess. The idea was that god was all-powerful and would protect the soldiers and confer victory in war. The notion was entertained that the gods of these tribes 'went in person with them to war—an idea which totemism bequeathed to more advanced stages in religion, for instance, to Peruvian polytheism.'² We learn from the Tamil classic *Śilappadikāram* that the Eiyar, perhaps the aborigines of South India, who lived by cattle-lifting and highway robbery, invariably invoked the aid of their goddess Koravai, the deity who led the Eiyar host in all their expeditions with a view to securing for them victory and getting in return sacrifices of both animals and men.³ Bows and arrows were their principal weapons, though the use of spears was not unknown.

THE EARLY INDO-ARYANS

The aboriginal tribes were not all entirely hunters or marauders. Some took to a pastoral life and they cultivated the arts of peace while pursuing a primitive form of agriculture. To this category belonged the so-called Indo-Aryans of the R̥g Vedic period. They settled in the plains, especially on the banks of rivers and streams, and counted their wealth by the heads of cattle they possessed. These primitive nomad tribes, which took to agriculture and cultivated habits of peace and not of war, became warlike through the ages and

2 F. B. Jevons: *An Introduction to the History of Religion* (6th ed.), pp. 108 and 242.

3 V. R. R. Dikshitar: *Śilappadikāram*, pp. 180-89; 'Eiyar' in *Sen Tamīl*, Madura, Vol. XXXI, No. 1.

by force of circumstances. First, the pressure of an ever-increasing population drove them to seek new settlements and new homes. In this expansion they came into effective contact with peoples alien to their culture, who would not suffer the intrusion of foreigners into their ancient and simple *habitat*. It was natural that they rose in revolt and the intruding tribes were forced to defend themselves against the armed attacks of the natives of the soil. Thus the defence complex fired their psychological impulses, and the result was the outbreak of hostilities.)

In this connexion we may examine a few passages in the *Aitareya Brāhmaṇa*^{3a} where it is said that a war broke out between the Devas and the Asuras. The latter had an organization and a leader and were successful against the unorganized hordes of the Devas, identified with Indo-Aryans, who were utterly routed. This signal defeat at the hands of the Asuras set the Devas think about their future. So they resolved to elect a king who was to be their leader in war. The Indo-Aryans attributed the success of their enemies to their leader and king. So the Aryan peoples met and elected a king from among themselves.

Here we have a reliable piece of evidence to prove that the institution of kingship in ancient India originated in war as it did in Europe. If we are to identify the Devas and the Asuras with the Aryans and Dravidians, the testimony of history supports the earlier advancement of political institutions among the Dravidians, which served for the Indo-Aryans as a model to copy and follow. We may note, in passing, that war, which

3a See Dikshitar: *Hindu Administrative Institutions*, pp. 62-63.

is largely regarded as a political institution, was in existence before a political society came into being, and long before the primary political institution of kingship. Can we not, then, say that war preceded all political institutions, and that with a settled order of society with the monarch at its top it came to be regarded as a necessary political instrument? Survivals of implements of wood and stone of a very primitive epoch indicate that the institution of war was very ancient, more ancient than we are ordinarily led to imagine.

SETTLED SOCIETY

With a settled society, the State emerged and inaugurated laws of marriage and property. The sanctity of family life and the rights of private property led to the increasing complexity of society. This resulted in the formation of different classes, or what in India we would call castes. To ensure social harmony, society was divided into a number of communities, each community being assigned particular duties (*svadharma*), to be discharged by it for the common welfare of all communities, without prejudicially infringing the duties and rights of other communities. In short, society was evolved on an economic basis which was well suited to the exigencies of those days. With the introduction of stringent laws and conventions which tended to bind society together as one whole, it was found that without some absolute authority to enforce these laws and customs society would not progress. Hence the inauguration of *danda*, or punishment, for the infringement of laws and customs, and of the *dandadhara*, or King. The instruments of this *danda* were the police and the army, though the institution

of police came later in the story of India's political advancement.

THE WARRIOR CASTE

Thus the value and importance of the army were realised very early in the history of India, and this led in course of time to the maintenance of a permanent militia to put down dissensions within and arrest aggressions from without. Of capital importance to the execution of both foreign and home policy was the institution of the army. War or no war, the army was to be maintained, to meet any unexpected contingency. In a country where there were many castes and communities whose occupations were hereditary, the standing army came to consist largely of the members of the hereditary fighting castes, thus maintaining a group solely devoted to the waging of war. This gave rise to the Kṣatriya or warrior caste, and the *kṣatram dharmam* came to mean the primary duty of war. To serve the country by participating in war became the *svadharma* of this warrior community. How this had a salutary effect on the administration of the land, a study of the history of ancient India will demonstrate. The cut-and-dry distinction of the civil population from the military and the equally clear distinction between the civil and military functions of the State helped to a large extent not only the progress of civil administration but also the moral and material welfare of the land. This cut deep at the root of that mental attitude now called militarism.

We are told that the educational system in Italy under the Fascists and in Germany under the Nazis has been directed so as to develop the militarist attitude

among the people. It prepares the whole community for war. There are again nations which advocate conscription involving compulsory military service for male adults. This necessarily leads to the separation of the sexes and affects the entire social structure. Things were different in ancient India. No doubt there was compulsory military service. But it was confined to one particular caste and it was not universal. The necessary education, drill, and discipline to cultivate militarism were confined to the members of one community, the Kṣatriyas. This prevented the militant attitude from spreading to other communities and kept the whole social structure unaffected by actual wars and war institutions. Says the *Atharva Veda*: 'May we revel, living a hundred winters, rich in heroes'.⁴ The whole country looked upon the members of this particular community as defenders of their country and consequently did not grudge the high influence and power wielded by the Kṣatriyas, who were assigned a social rank next in importance to the community which ministered to the intellectual and spiritual needs of the society.⁵

• 4 Bk. XIX, 12. 1. Harvard Oriental Series—Trans. by W. D. Whitney.

5 A thesis has been put forward by Prof. N. Ghose of the Dacca University in his *Indian Literature and Culture Origins*, that it was the Vrātyas who occupied the ancient Magadha and Anūpa Deśa and supplied man-power to the Indo-Aryans; that these Vrātyas became absorbed into the Aryan fold by the Vrātya Stoma ceremony, which is, according to him, a conversion ritual; that these Vrātyas formed the warrior caste and fought battles on behalf of the Indo-Aryans; that the result of this synthesis of culture was the birth of the *Atharva Veda* and other later literature glorifying the Kṣatriyas

PSYCHOLOGICAL FACTORS

Wars are attributed to certain psychological causes. Students of psychology and especially social psychology know that society is regarded as a vast group mind and that an individual is a part thereof, drawing his thoughts and purposes from it and contributing new thoughts and new purposes to it. Society is generally studied from three points of view⁶: firstly, it is limited by eternal and physical forces, as is seen from the social groupings and activities of primitive peoples; secondly, society is bound down by the forces and laws of organic life, as is seen in the tendencies of ancient peoples, not quite primitive, to form larger groups instead of the unorganized and isolated family groups; and, thirdly, society is subject to the laws of the mind, a stage in which 'the conditions of mind shall be the chief determinants of progress'. It is only with this last phase that we are concerned here. The compelling factors which guide and control the life and activity of society are instinct and habit. The characteristic of all instinct is feeling and we detect no thought-processes in it. But in habit we detect thought-processes. Both instinct and habit have their own value, not to speak of the dangers peculiar to each. With the broadening of the factor of intelligence, the value of instinct goes on diminishing and the value of habit goes on increasing. But it is to be observed that too much habit sometimes retards the

in particular. The theory is ingenious, but it is not convincing. See also D. R. Bhandarkar's *Some Aspects of Ancient Indian Culture* (Madras University, 1940), Lecture IV.

6 For a fuller treatment of the subject see E. J. Urwick: *A Philosophy of Social Progress* (Methuen, London, 1912).

faculty of thinking and consequently leads to mental stagnation.

From this theoretical consideration we pass on to examine how instinct and habit fixed the ship of ancient Hindu society and its members, in the direction of constant wars either within or without the group. In other words, we shall examine the psychological factors that led to ancient Hindu wars. These may be stated: (1) the mental atmosphere of the community being a caste society, (2) psychological barrenness of peace, (3) heroism and adventure, (4) human pugilism and pugnacity, (5) defence complex, (6) angry behaviour and spirit of jealousy and (7) the mastery motive.

Delisle Burns tells us that the mental atmosphere of a modern community is unfavourable to war. (This is unfortunately not true). Examining the mentality of the ancient Kṣatriya community, *i.e.*, their mental atmosphere, we can have no hesitation in saying that it was favourable to war and heroic feats.

(1) A CASTE SOCIETY

The ancient Hindu society was a caste society. By this we mean a system of social organisation, the framework of which is without any parallel in the social institutions of the world. The whole community was divided into four distinct groups (*varṇas*) governed by different customs and rules which are still in force in India. Separate occupations were assigned to each of these groups, to be followed hereditarily, though cases of lapses were not infrequent. But occupation did not form the basis of caste, though in theory it marked one group from another. Nor was race the basis of

caste, as Risley would have it.⁷ It was the natural outcome of social conditions which have been shaping themselves from primitive times. This is clear from the relation in which caste stands to the ancient family institution. It is the direct outcome of a system derived from a more or less spontaneous partition, where neither class-hierarchy nor theocracy played a significant role. Senart rightly says: 'The system under which India has lived is not purely an economic organisation of trades nor a chaos of strange and hostile tribes and races, nor again a simple class-hierarchy, but a mingling of all these, united by the common inspiration which dominates the functioning of all the groups, and by the community of characteristic ideas and prejudices which govern their order of precedence.'⁸

The Varna system of the ancient Hindus implied the fourfold division of society into Brahmans, Kṣatriyas, Vaiśyas, and Śūdras. The Brahmans formed the group of philosophers and teachers, the Kṣatriyas the group of rulers and warriors, the Vaiśyas the group of agriculturists and traders, and the Śūdras the group of men engaged in different menial services. The idea gained ground that to follow one's own *dharma* and to sacrifice one's own life, if need be, in the prosecution of that *dharma*, was the highest duty expected of every citizen, to whatever caste he belonged. We may remember how Kṛṣṇa laid emphasis on this point to the vacillating Arjuna who was out to fight his own kith and kin. This is the plain teaching of the *Bhagavad Gītā*. This insistence on *svadharma* is a sound economic concept.

7 *Ethnographical Glossary*. p. xxxiv.

8 *Caste in India*, p. 215.

It lays the axe on the principles of individual freedom, the struggle for existence, and the survival of the fittest. The individual is made to realise his responsibility and duty to himself, his family, country, state, and ultimately to God.⁹ In short, he is a member of a free corporate State. He stands or falls with society and State. He is part of it and not separate from it. It is a peculiar concept by which the individual did his duty and yet enjoyed freedom. Every caste realised its dependence on the other castes, and this tended to avoid caste wars. Hereditary callings and the absence of competition helped an orderly movement, unlike the perpetual restlessness of modern society due to lack of equilibrium. It is the strong bold bond, the corporate organisation, and recognised jurisdiction that stood to guarantee its perpetuity.¹⁰

It is a fact that the ancient Hindu society was divided into a number of water-tight compartments. It had all the evils of rigidity with little or no chance for elasticity. A man, by virtue of his being born in a certain community, continued to be a member of that community all his life. It became a hereditary social system where a Kṣatriya could not become a Brahman, or *vice versa*. This was considered as virtually trespassing the duties and rights of another community. Any such trespass was punished by the State. So ancient Hindu society, as it was constituted, became necessarily a caste society, but with democratic social

9 Dikshitar: *Hindu Administrative Institutions*, pp. 40-41; *The Individual in Hindu Polity*—Aryan Path, Vol. X. No. 4 (April, 1939): *Society and State in Ancient India*—Aryan Path, Vol. XI. No. 2 (February, 1940).

10 Senart, *op. cit.*, p. 60.

standards and conventions. In that state of society, in which a whole caste was set apart for the purpose of war, it was inevitable that that caste should be actuated by a warlike mentality, and that peace was despised. The assumption of that caste was that war was good for all time, and that war brought in its train not only glory to the individual knight but also glory and honour to the king and country. This aspect of the psychological impulse will be examined presently. But what deserves to be noted here is that with a settled community whose function was to defend the country by offensive or defensive methods, the mental atmosphere quickened the impulse to develop war-preparedness. This attitude of the mind was not entirely the result of a spirit of adventure but wholly the result of the realisation of the fact that by war the warrior and the hero were doing a piece of service which tended towards the common good and which was consequently acceptable to the common will. This was an important concept which was realised in abundant measure by every member of the Hindu warrior caste.

(2) PSYCHOLOGICAL BARRENNESS OF PEACE

It has already been explained that in a society where a separate caste was set up with the sole object of defending the kingdom from internal and external troubles, the tendencies to war were normal. Being born warriors and barred by rules from taking to other professions, the Kṣatriyas were impatient of peace. In fact it is the psychological barrenness of peace that led to many wars in India's ancient history. Our warriors in that period resembled the gallant knights of mediaeval Europe who took part in the Crusades to win back

Jerusalem for Christ, both a cause and an effect of chivalry. Peace to the Kṣatriyas was a kind of inactivity, of slow movement and of retrogression instead of progress. It was not in their nature to be inactive. To them peace begot war. They believed honestly that peace was a negation of all noble service and noble energy. It depressed their hearts and minds. It depressed their spirit of enthusiasm and initiative. On the other hand, their sincere belief was that to make war was a service that was noble and moral and promoted the welfare of their community and country. Moved by such ideas and ideals, in accordance with the spirit of the age in which they lived, they took heroically to fighting. But by this period war had become the duty of the State, and without the sanction of the State authority these warriors could not engage in wars of great magnitude. However nothing prevented them individually from showing their prowess by engaging in a number of adventurous campaigns. These campaigns had different motives behind them. Chief among them were the capture of women, the lifting of cattle, the seizure of wealth or other loot. These remind us of the wonderful race of heroes, the Normans, and the heroes of chivalry, the Black Prince, Sir John Chandos and Sir Walter of Manny as they still live in the pages of Froissart.¹¹

(3) HEROISM AND ADVENTURE

War is a school of strenuous life and heroism.¹² War and adventure assuredly keep all who are engaged

11 See Strachey's intrn. to *Le Morte D'Arthur* (Macmillan, 1907), p. xli and *The Chronicles of Froissart* (Macmillan, 1913).

12 W. James: *The Variety of Religious Experience* (Longmans,

in them from treating themselves too tenderly. The knights of ancient India were known as Śūras and sometimes Viras, both the terms connoting that they were valorous. The Śūras and Viras held a much higher rank than the ordinary run of warriors. In the *Atharva Veda Samhita*, Indra is addressed as a Śūra, and is said to possess heroism hundredfold. He pulled down the strongholds of Dasyus and scattered their army by slaying a hundred, a thousand, a ten thousand, and a hundred thousand millions.¹³ In fact the burden of the song in many a hymn of this Veda is heroism in exploits.¹⁴ Still above these were Rathis¹⁵ and Mahārathis.¹⁶ The terms themselves are evidence of the fact that such Knights were expert charioteers, who earned such titles by their valorous deeds displayed in previous engagements. Among those that won the laurel of a Rathi were Yayāti and Kārtavīrya Arjuna, both famous rājarṣis. The Mahārathas were there in numbers and all the five sons of King Ayuṣa who

1908), p. 367; Cp. N. K. Sidhanta—*The Heroic Age of India* (London, 1929).

13 Bk. VIII, 8. 1-7. (H. O. Series).

14 *Ibid.*, Bk. XIX, 13. 5-11.

15 आत्मानं च सारथिं अश्वान् स्वसैन्यं रक्षितुं समः

प्रहर्ता परसैन्यानां युद्धशस्त्रविशारदः

युद्धशस्त्रेषु निपुणं स रथित्वेन संमतः

16 एकोदश सहस्राणि योधयेत्यश्च धन्विनां

पूर्वोक्तं लक्षणैर्युक्तः पार्थिवस्याऽपि रक्षकः

महारथीऽति कथितो युद्धशस्त्रविशारदैः ॥

escaped the fatal axe of Paraśurāma enjoyed the enviable status of Mahāratha. Thus by high-flown exploits did the ancient heroes win honourable titles, of whose deeds the epics and the Purāṇas are full.¹⁷ Some of the champions again go by the name of Atiratha¹⁸ and Apratiratha. In the later mediaeval works, like *Hariharacaturanga*, towards the close of Book vii, it is said that in a battle where a thousand śūras were slain the Kabandha engaged itself in a tāṇḍava or devil dance. But the author of the *Hariharacaturanga* would go further and state that in a war where one śūra killed a thousand śūras like him, the Kabandha danced in glee. This devil dance in a war is not a later idea introduced into the military literature of the Hindus. That it was a very ancient concept is seen from the description of the battle on the Ganges between Śenguṭṭuvan and northern kings in the *Śilappadikāram* where Śūra Śenguṭṭuvan slew hundreds of śūras of Northern India; the Kabandha (Tamil—*Kavandam*) felt overjoyed at this, and to the accompaniment of music by the daughter of the Devil, danced what is called the Peykkuravai.¹⁹

CATTLE-LIFTING

In times of peace, besides the time spent in hunting, the Kṣatriyas took to a life of adventure to exercise their martial ardour. 'At a time such as that represented

17 See, for instance, the *Br. Purāṇa*, III. 68.20: 69. 21.

18 अमितान्योषयेत्यश्च पूर्वोक्तगुणसंयुतः

विज्ञेयो अतिरथीनाम्ना शस्त्रास्त्रनिपुणस्मदा ॥

19 Canto xxvi, 11, 206-210. See the description also in *Kaliṅ-gattupparani* 503-586 edited by Kannaiya Naidu (1941).

by the first story of the Epic, the warrior was always a robber and a pillager. This life was Knight's support, and cattle-lifting provided needed gain.'²⁰ All early raids were chiefly for cattle. There are a large number of hymns in the *Atharva Veda* praying for the protection of cows and cattle. In the thirteenth hymn of Book xix there are references to cow stalls and kine-winning chariots.²¹ From this reference and from that in Book vi, 67.3 we may conclude that cattle-lifting was practised on an extensive scale in the Vedic Age. In fact this was the primitive habit of savage tribes. We see from the *Śilappadikāram* that the Eiyar's profession was lifting cattle, looting and highway robbery. To these primitive men cattle constituted wealth, and a cattle raid meant the loss of one's property. In the *Purapporū Venṇūmālai* are given details which mark out the different stages of a military enterprise of the nature of cattle-lifting. The soldiers who undertook this enterprise decked themselves with *vetchi* garland. The owners of the herds who came out to rescue their cattle wore the *karandai*, a kind of basil, as their badge.²² That this primitive form of cattle-lifting survived even when people became civilised is seen in the *Mahābhārata*²³ where under instructions from Duryodhana the king of the Trigarthas entered the city of Virāṭa and drove away the kine. Uttara and Brhannalā (Arjuna in disguise) recovered the cattle after a straight fight. In

20 E. W. Hopkins, *J.A.O.S.*, XIII, p. 76.

21 5 and 7. See also Bk. II, 26; Bk. IV, 21; Bk. VI, 59.

22 See *Vetciṇṇadalam*; also Dikshitar: *Studies in Tamil Literature and History*, Sec. vi.

23 Mhb. Virāṭ Parva, Chh. xxxii ff.

some cases, cattle-lifting was a prelude to military campaigns. Another fact that may be remembered in this connexion is the large number of gifts in the shape of cattle given to the king by foreign allies.

CAPTURING GIRLS

Another occasion for the display of heroism and the spirit of adventure by the early Kṣatriya knights was afforded by the capture of maidens belonging to the neighbouring kings and countries. Shall we attribute this tendency to the psychological instinct of sexual passion? It is well-known that this primitive practice of running away with girls was once universal and not peculiar to ancient India alone. Indian conditions will be clear if we are sufficiently acquainted with the modes of marriage prevalent among the warrior caste. The most advertised form of royal marriage was *svayamvara*, which gave the maid the right of choosing her own husband, from among the princes assembled for the purpose.²⁴ Surely we can trace in this form of marriage survivals of the earlier and much simpler form which consisted of knights meeting girls openly or secretly and carrying them away with or without the knowledge of their relatives. In some cases the relatives of the girls acquiesced either because they themselves liked the match or felt too weak to offer a challenge to the captor. The latter was more probable. But a majority of such cases, as can be gathered from the fulness of descriptive details in the Epics and the Purāṇas, involved an outbreak of hostilities.

24 For evidence in Buddhist Literature, see B. C. Law: *A History of Pali Literature*, I, pp. 278-79; II, p. 459.

It may not be out of place to cite an instance here. Bhīṣma, the royal sage, once met three girls in the course of his visit to Kāśī and carried them away. He threw out a challenge to the party that came to recover them. He fought with all the contestants and established his right of possession.²⁵

Such instances, which could be multiplied, were the outcome of the virile temper of the Kṣatriya warriors in general. It was accepted as a primitive form of marriage by the law-givers. The law of the country named it the Gāndharva form of marriage, and brought it under the *rājasa* system which constituted three out of the eight forms of marriage in ancient India. Does this mean rape and was it countenanced by ancient society? We certainly cannot call this method of adventure a rape, for there was the obligation on the part of the adventurer to treat the seized maiden as his wife for all legal and social purposes. He could not and did not drive away or divorce her after the satisfaction of his lust. In short, the captured maiden became the wedded wife of the knight. Thus behind the *rājasa* form is to be traced a thin veil of the *sātvika* element.

Instances of forcible abduction are not wanting. One signal instance is that of Rāvaṇa, the Rākṣasa king of Ceylon, carrying away by force and against her will, Sītā, the consort of Rāma, prince of Ayodhyā. This resulted in the great Rāma-Rāvaṇa yuddha in Lankā, which ended in the death of Rāvaṇa with all his hosts, and in the triumph of Rāma. We know again of the adultery committed by Vāli, king

25 Mhb. Ādiparva, 102, 3 ff.

of Kiṣkindhā, with the wife of his brother Sugrīva, after driving him away by force out of the kingdom. For this Vāli lost his life, for he was killed by Rāma on an earnest appeal from Sugrīva.²⁶ These cases involved a deadly combat where invariably the aggrieved party came out crowned with victory. Be it remembered that these captors belonged to the primitive tribes, who had emerged by the time of the *Rāmāyaṇa* into a semi-civilised state. We are led to infer that such practices were un-Aryan. It may be noted, as pointed out by Hopkins in the cases of Gāndharva marriages, that caste weds caste.²⁷ The adventures of these gallant people were directed to the confines of the Kṣatriya caste. The girls of other castes, higher or lower, were not interfered with.²⁸ But Hopkins is positively wrong when he states that 'even with high caste girls the king is fond of connecting himself without formality'.²⁹ The burden of proof lies on him who makes such a bold statement. The practice is to marry 'down' and not 'up'. Whatever this may be, it is important to note that the instinct of sex impelled by passion and emotion led to the capture of girls and also to rape³⁰ which often led to wars in the ancient world, sometimes of great magnitude.

26 It may be noted that Sugrīva's marriage with Vāli's widow is no rape.

27 The Nair *sambandam* in Malabar has been likened to Gāndharva marriage.

28 Hopkins, *op. cit.*, p. 168.

29 *Ibid.*

30 Cp. The rape of the Sabine women.

(4) PUGNACITY

Added to this was the instinct of pugilism and pugnacity. The Kṣatriya warriors were taught and trained in such a way as to develop the spirit of pugnacity. The Epic has it that the sword should hold what the sword has won:

यदोजसा न लभते क्षत्रियो न तदश्नुते V. 74. 23.

What he does not win by strength is not his own. Elsewhere the Epic rules thus:³¹ The highest duty and pleasure for a warrior is to die fighting in war. Why is this? It is because one's death in a contest makes him live in heaven.³² Odd as it may seem, the ancient Hindu, to whatever caste he might belong, developed a peculiar mental attitude from his childhood that by doing his ordained duty he got his freedom from the bondage of saṃsāra (i.e. cycle of births and deaths), and enjoyed heavenly bliss as a guest of the gods. Influenced by such moral ideals, no wonder the ancient warriors of the land depended on their boldness³³ and strength.³⁴ To escape from the field of battle without fighting firmly and also to ask for quarter³⁵ were regarded heinous offences against both God and State. For is it not stated that to win victory or die in the field of battle is the eternal law promulgated by the Creator himself?³⁶ These sentiments which were largely supported by the then moral code made the Kurus' chief

31 Mhb., V, 160, 71.

32 *Ibid.*, II, 22, 18.

33 *Ibid.*, I, 202, 18.

34 *Ibid.*, II, 69, 15.

35 *Ibid.*, IV, 38, 29; V, 3, 20 ff.

36 *Ibid.*, V, 51, 51; IX, 31, 34.

proclaim at the top of his voice: 'I elect glory even at the cost of life'.³⁷

In the light of such regulations and principles governing the ancient Indian warrior caste, need it be said that the Kṣatriyas, who were often prompted by the instinct of pugnacity, entered blindly upon wars which affected considerably all belligerents? Instead of trying 'to discount and to control these outbursts of collective pugnacity', ancient Hindu society encouraged them 'under a system of civilised legality'. A warrior's code was based on law and custom, which not only countenanced but also sanctioned such a system as moral and legal. It has been accepted that its operation leads to the development of the higher social life. Speaking of India and China, a well-known psychologist remarks that 'the bulk of the people are deficient in pugnacious instinct.'³⁸ The remark shows that the learned author has no correct vision of the Hindu social structure. In a society which consisted of four castes, three castes were devoted to peaceful professions, and naturally the bulk of the people could not have been pugnacious. But it needs repetition that with the military group pugilism and pugnacity were rampant. If Hindu society had not subjected itself for long ages to a healthy diversity of functions and assimilation, there would not have been that progressive integration which has marked it for centuries. It would have crumbled to pieces and we should have long ceased to exist as a vital race. But it is this healthy social

37 Mhb., III, 300, 31.

38 W. Medougall: *An Introduction to Social Psychology*, pp. 281-82 (15th Edn.—Methuen, London).

organisation that has preserved the Hindu nation in spite of frequent foreign invasions and ceaseless internal turmoil. We are told that efforts are being made in the West to replace pugnacity by the emulative impulse. This is only an experiment; and how far this tendency of emulation would supplant the pugnacious element, it is for the future historian to say.

MATSYA NYAYA

The next question is how the instinct of pugnacity came to stay in the world and what was its contribution towards making it an important factor in the evolution of human nature? This question is answered by the psychologist thus: 'The selection of the fit and the extermination of the less fit (among both individuals and societies) result from their conflicts with one another'.³⁹ This is a very significant statement; for it is, in other words, the theory of *mātsya nyāya*. Literally rendered, the term *mātsya nyāya* means the 'Rule of the Fish'. What is the rule of the fish except the unwritten law of the bigger fish devouring the smaller ones? Elsewhere I have applied this term to the *arājaka* state. We have an elaborate description of such a state of anarchy, as we should call it, both in the *Mahābhārata*⁴⁰ and in the *Rāmāyaṇa*.⁴¹ The substance of these accounts in the epics shows that in an anarchical state the country is subject to plunder and devastation. Life becomes unsafe. There is no security of person or property. The strong rob the weak and the innocent

39 W. McDougall: *An Introduction to Social Psychology*, p. 295.

40 Śānti Parva, Chh. LXVI and LXVII.

41 Ayodhyā, Ch. LXVII.

of their wealth. Rape or violation of women is common. Like fish in a pool of water or a herd of cows with no cow-herd, people injure and kill one another. There is no reverence for parents, teachers, or the aged. Agriculture and industry suffer. There are no regular marriages, and the intermixture of castes is free. Religious authorities are openly defied. No one sleeps without fear.⁴²

This state of anarchy presupposes a state of nature where one notices a chronic warfare between strong and weak individuals in a group and between strong and weak groups. Often the weak are defeated and subjugated by the strong. This epic idea is stressed with much emphasis in the Dharmaśāstras like that of Manu,⁴³ the Purāṇas like the *Matsya*,⁴⁴ and in later works like the *Yuktikalpataru*,⁴⁵ and Raghunātha's *Laukika Nyāya Saṅgraha*.⁴⁶ What does all this show except that before the introduction of popular monarchy investing the holder of that office with powers of *daṇḍa*, in the light of the established law of the realm, the communities were subject to no law and suddenly developed a combative instinct excited by crude sentiment? Hence the necessity of putting down individual idiosyncrasies and building up a society which would develop a spirit of altruism and extend the virtues of family life to groups and nations. The foundation of monarchy and a new social order based on functions brought to an end the

42 *Hindu Administrative Institutions*, pp. 19-27.

43 Manu, VII, 20 and Kullūkabhaṭṭa's gloss thereon.

44 *Matsya Purāṇa*, Ch. 225, v. 9.

45 *Yuktikalpataru*, 105.

46 *Laukika-Nyāya-Saṅgraha*, Pandit Series, 1901, p. 122.

concept of *mātsya nyāya*. Occasionally its effects were felt. It is said that in the ninth century A.D. the people elected as king, Gopāla, the father of the more famous Dharmapāla, of the Pāla dynasty, in order to free themselves from the prevailing state of *mātsya nyāya*.^{*} This shows that there is considerable truth in the statement: No State, no Society. Unless a strong executive authority places restraints on common impulses like jealousy, fear, passion, these are brought into play in the everyday life of the citizen. So in their social order the ancients merged the individual into the group by making him one of the group and in the group, so that he was to subordinate his opinion to the group-opinion. By means of group organisation and devolution of powers, the State in ancient India solved many social, economic, and even political problems that confront the modern politician and statesman in the civilised world.⁴⁷

(5) DEFENCE COMPLEX

We may now pass on to another psychological source of war. To-day we believe honestly and sincerely that defence and means of defence are quite essential for every nation to maintain its code of honour and to sustain the special national interests. Whatever theorists may say on the ethics of defence, it has come to stay as a force in politics, whether we will it or no. We therefore cannot ignore it but have to reckon with it as a necessary institution whether it is unmoral or non-moral. To-day capitalism and imperialism, infringe-

^{*} Jayaswal: *Imperial History of India*, p. 42.

47 Dikshitar: 'State and Society in Ancient India'—*Aryan Path*, Vol. XI. No. 2.

ment of trade rights, etc., have often been sufficient grounds for the outbreak of war. Again, the defence of a small state against the aggression of a big neighbouring power has been a cause of wars among the great Powers in modern times.

The economic factor as a cause of war did not loom large in the Indian horizon. In ancient India the State was itself a producing and manufacturing concern. All the key industries were undertaken by the State. There was little or no private enterprise, and the jealous eye of the State watched even this carefully. This system prevented the formation of a capitalist class which has become a potent force in modern politics. Nor were there war-traders in ancient India.⁴⁸ The duty of these traders lies in the supply of arms and armaments to the soldiers. Their business thrives only as long as war goes on. So they leave no stone unturned to infuse into the nation the war spirit. In ancient India there was, to our knowledge, no private firm which manufactured weapons of war. Their manufacture and supply were a State monopoly. There was the arsenal which was a department attached to the War Office. There may have been in ancient India an economic motive on the part of the State to build up a sound economic democracy, as in the case of Daṇḍaka, an ancestor of Rāma, king of Ayodhyā, who realised the economic value of the forests to his empire, which was in itself a plain country, and who therefore led an expedition to South India as far as Kiṣkindhā and brought the whole forest territory of the Dakhan under his control. It is difficult to look for

48 G. H. Perris: *The War Traders* (Chancery Lane Press, 1914).

economic causes which could have led to wars in ancient India. Society and State were so constituted that no economic distress of an acute kind stared the ancient Indian in the face. Though we can trace overseas trade at the time of the R̥g Veda, where a certain merchant Bhujja is mentioned as shipwrecked in the course of his commercial adventures, nowhere is there any evidence to show that international trade relations led to the outbreak of war.

DEFENCE AND AGGRESSION

The ancient Hindus were a sensitive people, and their heroes were instructed that they were defending the noble cause of God, Crown and Country. Viewed in this light, war departments were 'defence' departments, and military expenditure was included in the cost of defence. In this, as in many cases, ancient India was ahead of modern ideas. All defence reduced to a theory becomes aggression. For what is defence to one nation is aggression to the other, and *vice versa*. The impulse of menace and a spirit of jealousy were the chief factors which actuated ancient Indian kingdoms and empires, and hence we find every writer on Arthaśāstra and Nītisāra insisting upon a heavy military expenditure for defence.

FEAR IMPULSE

Every empire, not to speak of every small independent State, was obsessed by the fear impulse, as the psychologist calls it.⁴⁹ A sense of insecurity of life was often lurking in the State mind, and this led to the

49 R. S. Woodworth: *Psychology* (1930), p. 256.

organisation of an elaborate machinery of defence. Many hymns in the *Atharva Veda* reflect this state of mind, which are designated under the group *abhaya gaṇa* of *Kauśika Sūtra* (16-8). A few of them may be reproduced here.*

‘What we fear, O Indra, make thou fearlessness for us of it; O bounteous One, help that for us by thy aids; smite away haters, away scorers.

‘Do thou knowing, lead us towards broad space, light that is heavenly, fearlessness, well-being; may we dwell under the formidable arms of thee the stout one, O Indra (those two) great refuges.

‘May the atmosphere make for us fearlessness: fearlessness both heaven and earth here: fearlessness from behind, fearlessness from in front: from above, from below, be there fearlessness for us.

‘Fearlessness from friend, fearlessness from enemy, fearlessness from one known, fearlessness from one away, fearlessness for us by night, fearlessness by day; be all places my friend’ (Bk. xix, 15). See also *Ibid.*, 16.

‘Let Agni with the Vasus protect me on the east; in him I step, in him I take refuge: to that stronghold I go forward: let him defend me, let him guard me: to him I commit myself: Hail!’ (Bk. xix, 17.1. etc.).

Added to this may be cited another hymn of the *Atharva Veda* (Bk. vi, 40):

‘Let fearlessness, O heaven and earth, be here for us: Let Soma, Savitar, make us fearlessness: be the wide atmosphere fearlessness for us: and by the oblation of seven seers be there fearlessness for us.’

* W. D. Whitney’s trn.

‘ For this village let the four directions—let Savitar make for us sustenance, well-being, welfare: let Indra make for us freedom from foes, fearlessness: let the fury of kings fall on elsewhere.’

‘ Freedom from enemies for us below, freedom from enemies for us above: O Indra, make us freedom from enemies for us behind, freedom from enemies in front.’

On account of this fear the ancient Kṣatriya prayed to Indra and other Vedic deities for success over enemies, and these are called battle-hymns.⁵⁰ One verse runs as follows:

‘ Let their weapons fall down: let them not be able to fit the arrow: then, of them fearing much let arrows strike in the vitals ’.⁵¹

Again, ‘ Let not the piercers find us, nor let the penetrators find (us): far from us make the volleys fly, dispersing, O Indra ’.

Among the deities invoked for this purpose were Arbudi and Nyarbudi as allies of Indra, as also Tri-sandhi.⁵² One form of prayer consisted of oblations like the thousand-slaying *homa*.⁵³

This fear was reciprocal. A subject nation, for example, entertains fears of being swallowed by the imperial power some day or other. On the other hand, the imperial power would closely watch the movements of this subject kingdom, lest it should slowly mobilise its forces in secret and raise the standard of revolt having always an eye to the proper time and place. For

50 Sāmgrāmikāṇi—Bk. I, 19; Bk. II, 19; Bk. VI, 65; Bk. VII, 62 and 92; Bk. VIII, 8.

51 A. V. Bk. VIII. 8. 20.

52 *Ibid.*, Bk. XI, 11, 4 and 23.

53 *Ibid.*, Bk. VIII, 17; Cp. Bk. XI, 9 and 10.

instance, Kalinga, a subject country under Candragupta and his son, rebelled when Aśoka came to the throne. Aśoka had to invade this kingdom and reconquer it at the expense of many lives including the innocents. Thus the subject kingdom which was actuated by the motive of getting rid of the yoke of imperial power, was keen on its defence. Instances of this type may be multiplied.

(6) ANGRY BEHAVIOUR

If the fear impulse is of the defence-complex, angry behaviour is of the aggression-complex.⁵⁴ Śenguṭṭuvan wanted to lead an expedition to the North and show off to the kings there his prowess. But no activity is aroused by the motive alone. Given the right stimulus and the motive, there comes automatically the response.⁵⁵ While the king was sitting in the audience hall filled with resentment at the insult offered to him by northern kings in their joint social meeting, there came the suggestion to found a temple to the chaste Kannaki by carving the deity on a stone taken either from the Podiyil or the Himalayas. When it was agreed to consecrate the temple in honour of Pattini Devī, Śenguṭṭuvan said that he would get the slab of stone from the Himalayas after duly bathing it in the Ganges and reducing to subjection the northern kings if they should resist him. Soon he made elaborate preparations for the expedition and set out for the north. He extended his arms successfully, defeated a confederacy of northern kings, and after imprisoning the chief monarchs, Kanaka

54 See in this connexion hymns 42 and 43 of Bk. VI, A. V. to remove wrath and to assuage wrath.

55 Woodworth: *op. cit.*, ch. vi.

and Vijaya, he made them bear on their heads the slab of stone to his distant capital at Vañji in Tamil India.⁵⁶

An examination of this war fought by Śenguṭṭuvan on the banks of the Ganges shows that it was not a defensive one, but was due to the aggressive impulse on the part of the monarch. 'If you would avoid war, study human beings, study in particular the impulses of aggression; and study them first where they are more readily open to inspection in yourself.'⁵⁷ Whatever views theorists may hold on the defence-complex, it is not possible to deny that aggression may be caused even by a slight provocation. We cannot get over the fact that impulses of aggression have led to several wars in ancient India. For the effective discharge of such aggressive impulses, sadistic and masochistic, war-mongering provided, as it even now does, an admirable channel, though the belligerents on either side knew full well that in injuring others they injured themselves. In several cases when we speak of defence as one of the causes of war, we speak, possibly consciously, in terms of aggression. If we turn to the pages of the Purāṇas we find that the Haihaya king was responsible for the death of Jamadagni, father of Paraśurāma. The natural thing for Paraśurāma would have been to avenge his father's murder. Instead of stopping with this, in a fit of exasperation he resolved to ruin root and branch the Kṣatriya race for twenty-one generations. It was a mad venture, we may say, based on

56 Dikshitar: *Śilappadikāram*, Intrn. pp. 3-8.

57 Edward Glover: *War, Sadism and Pacifism* (Allen & Unwin).

an aggressive spirit. Animated by such destructive impulses, Paraśurāma went on persecuting one Kṣatriya prince after another. There would not have been a Kṣatriya community after him, had not some princes hidden themselves in caves and forests out of his sight and come out after the bloody conqueror had ceased fighting.

THE SPIRIT OF JEALOUSY

In the examination of this jealousy motive we find an unbridled indulgence of almost all evil passions. The *Atharva Veda* (Bk. V, 8. 3) says: 'Let not the gods go to his call; come ye only unto my call'. Jealousy, if nothing else, was the real cause of the great Mahābhārata war fought at the historic Kurukṣetra, the belligerents being the Pāṇḍavas and Kauravas who were after all agnates. When king Pāṇḍu was unable to wield the reins of administration, Dhṛtarāṣṭra was elected to the throne. The five sons of Pāṇḍu and the hundred sons of Dhṛtarāṣṭra were trained by common teachers, and the Pāṇḍavas gained the knowledge of science and the use of weapons much more quickly and much more easily than the Kauravas. At this the Kauravas became jealous of their cousins, and from that time they, under the guidance of their eldest brother Duryodhana, laid plans to get rid of the growing power and influence of the Pāṇḍavas. Kṛṣṇa, the king of Dvāraka and a skilled diplomat, saw the justice of the Pāṇḍava cause and threw his whole weight on their side. This further increased the jealousy of Duryodhana, who sought secret means to do away with the five brothers. Finding that all his plans had failed, Duryodhana angered his cousins to such a pitch that nothing

short of war, it was thought, would result. Huge forces were brought into the field especially by Duryodhana, and war was waged for eighteen days. We need not enter into the details here. The result was that all the Kauravas and their soldiers were ruthlessly killed, and the Pāṇḍavas won a decisive victory. The Bharatakaṇḍa lay at the feet of Yudhiṣṭhira, the royal sage, and his four brothers. The Pāṇḍavas became the virtual rulers of all India and their alliance was sought by many a prince including those of the Tamil kingdoms of the South, with whom the Pāṇḍavas had relations of a social and political nature. If we are to believe the second stanza in the anthology of the Tamil classic *Puranānūru*, it is one Udiyan Ceral that fed the combatants of the Mahābhārata war.

(7) THE MASTERY MOTIVE

Jealousy brought in its train imperialistic notions of overlordship (*ādhipatya*) and love of glory. This mental attitude is reflected in several hymns of the *Atharva Veda*. One hymn says: *

‘Unto our glorious Indra, rich in glory, would we, rendering homage, with glories pay worship; do thou bestow on us royalty quickened by Indra: in thy bestowal here may we be glorious.’

‘Glorious was Indra, glorious was Agni, glorious was Soma born: Glorious, of all existence am I most glorious’. (Bk. vi, 39).

‘Glorious let the bounteous Indra make me:
Glorious both earth and heaven here:
Glorious let god Savitar make me.’

* W. D. Whitney’s trn.

‘ As Indra is possessed of glory in heaven and earth, as the waters are possessed of glory in the herbs, so among all the gods may we, among all, be glorious.’

‘ Glorious was Indra, glorious was Agni, glorious was Soma born: Glorious, of all existence am I most glorious.’ (Bk. vi, 58).

‘ O ye Ásvins, lords of beauty! Anoint me with the honey of bees, that I may speak brilliant words with the people.’

‘ In me (be) splendour, also glory, also the fatness that belongs to the offering; let Prajāpati fix that in me, as the heaven in the sky.’ (*Ibid.*, 69).

The prospect of glory is itself an incentive to deeds of heroism. To quote the *Atharva Veda* again, there is a hymn addressed to Indra thus:

‘ O Indra, come to my call: this will I do: that hear thou: let these overrunners of Indra’s bring to pass my design: by them may we be equal to heroism.’ (Bk. v, 8.2).

The terms empire and imperial sway, as I have explained elsewhere,⁵⁸ do not connote the meaning by which we understand these terms to-day. The Roman Empire meant the gradual extension of Roman citizenship and Roman law and the spread of the Latin tongue. The British Commonwealth means the establishment of British methods of law and order, the use of the English language for purposes of administration, and the development of British democratic institutions. Imperial sway in ancient India meant the active rule of an individual monarch who by his ability and prowess brought to subjection the neighbouring chieftains and

other rulers, and proclaimed himself the sole ruler of the earth. This goes by the name of *digvijaya*. It is not necessary that he should conquer all States by the sword. A small State might feel the weight of a conquering king and render obeisance of its own accord. Whether this willing subordination is sincere or feigned, open or veiled, the fact is that it is there. The acknowledgment of overlordship of a certain monarch or the willing acquiescence of lesser powers to a greater power invests the greater power with the halo of imperialism.

The position of subdued or vassal States was that they retained their old methods of administration, their laws and customs, their language and their religion. The visible manifestation of their subordinate capacity lay in periodical payment of tribute and presents, assistance in war, and the absence of separate foreign relations.⁵⁹ Under weaklings the empire broke down and under the powerful it was built up. Need it be said that in any case defence was absolutely essential either to the Imperial power or to the vassal State? According to the Śāṅgam classics, each of the respective rulers of the chief Tamil kingdoms, the Cēra, Cōḷa and Pāṇḍya, carried his sword as far north as the Himalayas, and implanted on its lofty heights his respective crest the bow, the tiger, and the fish.

In these adventures which were undergone for their glorification, the Tamil kings did not lag behind their northern brethren. The very epithet *Imayavaramban* shows that the limits of the empire under that Emperor extended to the Himalayas in the north. This title was

59 Cp. N. N. Law: *Inter-state Relations in Ancient India*: pp. 62-63 (Calcutta Oriental Series, 1920).

also earned by Ceran Śenguṭṭuvan by his meritorious exploits in the north. Names like the Cōḷa Pass in the Himalayan slopes, which in very early times connected Nepal and Bhutan with ancient Tibet, give a certain clue to the fact that once our Tamiḷ kings went so far north as the Himalayas and left their indelible marks in those regions.⁶⁰ If in the epic age a Rāma and an Arjuna could come to the extremity of our peninsula, and in the historical period a Candragupta or a Samudragupta could undertake an expedition to this part of our country, nothing could prevent a king of prowess and vast resources like the Cēra king Śenguṭṭuvan from carrying his arms to the north. The route lay through the Dakhan plateau, the Kalinga, Malva, and the Ganges. Perhaps it was the ancient Dakṣiṇapatha route known to history from the epoch of the *R̥g Veda Samhitā*. These expeditions were prompted by what the psychologists would call the mastery or self-assertive motive. This is clearly illustrated by a hymn of the *Atharva Veda*. (Bk. iv, 22. 1).

‘Increase, O Indra, this Kṣatriya for me: make thou this man sole chief of the clans: unman all his enemies: make them subject to him in the contests for pre-eminence.’

‘Of lion aspect, do thou devour all the clans: of tiger aspect, do thou beat down the foes: sole chief, having Indra as companion, having conquered, seize thou on the enjoyments of them that play the foe’. (*Ibid.*, 7).

Again, the king who became conqueror of all India

60 See M. Raghava Iyengar’s article in *Kalaimagal*. Vol. I. pp. 56-63.

was entitled to the distinction of being called a Samrāt. In the Purāṇic period the great Kārtavīrya Arjuna of the Haihaya clan spread his arms throughout the ancient Indian continent and earned the title of Samrāt. The same principle of glory and distinction underlay the performance of the sacrifices, Aśvamedha and Rājasūya, which were intended only for the members of the Kṣatriya community. Sometimes these *yajñas* were made by a prince in the evening of his life, after he had attained a ripe age when he could no more bear arms effectively and was about to retire to a life of peace and prayer, leaving the responsibilities of the kingdom to his successor, invariably the eldest son. Dāśarathi Rāma and the Pāṇḍava Yudhiṣṭhira engaged in such sacrifices after the historic battles in which they took leading and glorious parts. Coming nearer home, we find Śenguṭṭuvan performing a Vedic sacrifice after his return from the north where he defeated all the northern monarchs.

A prominent feature of the Aśvamedha consisted of letting a sacrificial horse roam about the country as it pleased, and it was open to other chieftains either to allow it to go its way, or keep the animal in their territorial limits, which was a signal for claiming superiority and hence preparedness to fight out. Often the horse went unrestrained. But there were cases where jealous kings resented and the resentment led to fighting. Everyone knows the fate which overtook the sixty thousand sons of Sagara in the course of their search for the sacrificial horse. We are told again that the young sons of Rāma—Lava and Kuśa—had the sacrificial animal of Rāma bound, and this led to a great fight. In these cases the army was not certainly maintained for

defences but to satisfy the vainglorious temperament of certain monarchs.

Their vanity did not end here. It was often nurtured by avidity to attain *Indratvam*. These ancient Kṣatriya monarchs believed very seriously—though this may seem irrational or superstitious—that by performing a hundred Aśvamedha sacrifices, they got the higher status of Indra. The performer became the king of the gods and lord of heaven.

In this connection we may quote one or two hymns of the *Atharva Veda* which fairly represent this idea or ideal:

‘ Now do I adorn this man as superior to his fellow,
for attainment of Indra; do thou increase his
authority, his great fortune, as the rain the
grass ’.

‘ For him, O Agni and Soma, maintain ye dominion,
for him wealth: in the sphere of royalty
make ye him superior to his fellow ’.

‘ Whoever, both related and unrelated, assails us,
every such one mayest thou make subject to me,
the sacrificer, the soma-presser.’ (Bk. vi, 54).

It was an age of crude mythology. To go to heaven and become the lord of heaven was the ruling passion of every monarch. If one Aśvamedha yajña meant an enormous amount of money, time, and energy, it may well be imagined what a hundred Aśvamedhas would cost. No wonder there were perpetual wars, now with one king, now with another. Such religious beliefs and traditions made wars inevitable. The Aśvamedha was certainly an instrument to provoke the feelings of fellow-monarchs, equal, superior, and inferior. The smaller powers acquiesced generally, but the greater powers, to

use a modern term, challenged and provoked war. A study of these wars, from a psychological point of view, shows that what is defence to one State is aggression to the other, and *vice versa*. This sort of imperialism on the part of the ancient Hindu monarchs to become Samrāṭs and their kingdoms to be developed into Sāmrajyas, was of the nature of federal units centring round a dominating emperor⁶¹. The attainment of Ekarājatvam or the sole kingship of all the then known earth, was often attended by the sacrifice of Aśvamedha,⁶² a ceremony performed by an emperor already consecrated to rulership. This bears testimony to 'the existence of the territorial ideal of a one-State India' (Cakravartikṣetram of Kauṭilya). These kings were called Sārvabhaumas⁶³ and Ekarāṭs.

A hymn of the *Atharva Veda* is pertinent:

'Chief of Indra, chief of heaven, chief of earth is this man, chief of all existence: do thou be sole chief.'

'The ocean is the master of the streams: Agni is controller of the earth; the moon is master of the asterisms: do thou be sole chief.'

'Universal ruler art thou of Asuras, summit of human beings: part-sharer of the gods art thou: do thou be sole chief.'^{63a}

Vedic kings aimed at it, and epic rulers realised it. The idea of *ekarāṭ* continued down to Buddhist

61 See Jayaswal: *Hindu Polity*. I. p. 137.

62 *Śāt. Br.* XIII, 7.1.

63 See Pāṇini, V, 1, 41-2.

63a वृषेन्द्रस्य वृषा दिवो वृषा पृथिव्या अयम् ।

वृषा विश्वस्य भूतस्य त्वमेकवृषो भव ॥

times and even later. The Jātakas, which are said to belong to the fifth or sixth century B.C., make pointed reference to an all-India empire.⁶⁴ Two centuries later Kauṭalya records the international relations between an Ekarāja and the Sangha, and recommends the cementing of the alliance with subsidy and peace, and in the case of refractory Sanghas, with war.⁶⁵ This concept of an all-India empire stretching from Cape Comorin to the Himalayas, according to Kauṭalya⁶⁶ receives further support from another important political term: *ekacchatra*, or one-umbrella sovereignty. To add to these notions of imperial rule we have the theory of Kaṇika Bharadvāja, a political thinker who figures in the *Mahābhārata* and whose view is apparently rejected by Kauṭalya, namely the usurpation of degenerate dynasties. These pieces of evidence go to prove, beyond doubt, that imperialism as understood and realised in ancient India was one of the causes of chronic warfare.

Thus a number of psychological factors prompted the ancient Kṣatriya to approach the problem of war, and made war inevitable. As already pointed out, there was one fundamental and vital difference between the

समुद्र ईशे सवतामग्निः पृथिव्या वशी ।

चन्द्रमा नक्षत्राणामीशे त्वमेकवृषो भव ॥

सम्राडस्यसुराणां ककुन्मनुष्याणाम् ।

देवानामर्धभागसि त्वमेकवृषो भव ॥ Bk. VI. 86.

64 Sakala Jambūdvīpa eka rājyam. 4.

65 Ar. Śās. Bk. XI, 1.

66 Ar. Śās. Bk. IX, 1.

systems of ancient Indian warfare and those of modern times. In ancient India war affected only the War Department of the State and the warrior class. It did not eat into the vitals of the social structure, as it does to-day. Society pursued the arts of peace, trade, and commerce unaffected by the wars that were fought now and then. A kingdom conquered and a king vanquished meant no disturbance to the age-long civil administration of the kingdom. Often the defeated kings were re-instated, and the old administration was suffered to exist so long as that king acknowledged the sovereignty of the emperor by tribute and other means. This was the nature of imperial conquest and imperial rule in ancient India.

✓ Though wars were frequent, they were not recklessly entered into and ruthlessly fought. There was no slaughter of innocents. Policy and method characterised these wars. Immoral and unrighteous modes of war were as far as possible avoided, and they were put into operation only if exigency dictated such a course. We shall examine these in the following pages.

CHAPTER II

THE LAWS OF WAR

SECTION I

THE WARRIOR'S CODE

War was inevitable in primitive communities as there was neither a social organization nor a pronounced political status. In the earlier stages of civilisation war was regarded as a normal feature of life. But with the growth of civilisation, war came to be looked upon as a serious business, which should not be entered into recklessly and ruthlessly but should be governed by ethical and moral codes. From the earliest times the warrior was a robber and a pillager, as we see in the Eiyar tribe described in the *Śilappadikāram*. But when society became organised and a warrior caste came into being, it was felt that the members of this caste should be governed by certain humane laws, the observance of which, it was believed, would take them to heaven, while their non-observance would lead them into hell. In the Vedic age we have no evidence to indicate the existence of an accepted code of fighting. Political society was just then emerging from the tribal community. But in the post-Vedic epoch, and especially before the epics were reduced to writing, lawless war had been supplanted, and a code had begun to govern the waging of wars. The ancient law-givers, the reputed authors of the *Dharmasūtras* and the *Dharmaśāstras*, codified the

then existing customs and usages for the betterment of mankind. Thus the law books and the epics contain special sections on royal duties and the duties of common warriors. The seers and the legists thought that the high road to peace lay in the consummation of a social order guided by a code of humane laws, moral and ethical in character.

It would be interesting to study the rules which restrained the warrior's whims and ennobled his character and conduct. In this study we have to distinguish between general rules and special rules, *sādhāraṇa dhārma* and *svadharmā*. With regard to general rules, it is incumbent on the Brahman to perform six duties: learning, instructing, sacrificing, causing sacrifices to be performed, making gifts, and receiving gifts.¹ Of these, three were common to the Kṣatriyas also: learning, sacrificing and making gifts. The Kṣatriyas were exempt from the other duties enjoined on the Brahmans, *viz.*, instructing, causing sacrifices to be performed, and receiving gifts.² These three were considered the special duties of the Brahman community and intended to benefit society at large. By imparting instruction and by performing sacrifices, which services entitled him to receive gifts, the Brahman ministered to the education and religion of the people. The Kṣatriya was not expected to do these offices, which would considerably hamper his special *dharmā* and create a breach in the established social order.

The functions common to both the communities—learning, sacrificing, and bestowing gifts—were intended

1 *Manu*, X, 75.

2 *Ibid.*, 77.

for their moral and spiritual elevation in society. Manu lays down that in addition to these three functions, the Kṣatriyas should attend to the defence of the country (*prajānām rakṣaṇam*), and be moderate in the enjoyment of worldly pleasures like dancing, music, and women.³ It was realized that the Kṣatriya's excessive indulgence in ephemeral pleasures would be detrimental to his very responsible work of defending the country from external attacks and internal risings.⁴

The first and foremost among the general duties was study, *adhyayanam*. The period of study for a Kṣatriya commenced at the age of six and continued up to the end of his twenty-second year,⁵ when the warrior usually took to arms. This was so only in theory. In practice sixteen was considered the normal age to get the Kṣatriya knighthood and to entitle him to enter the field of battle.⁶ When the sage Viśvāmitra wanted to take the boy Rāma to fight the Rākṣasas in the forests, Daśaratha pleaded that he was not yet sixteen,⁷ with the implication that sixteen was normally the age at which boyhood ordinarily terminated. In the *Mahābhārata* again we are told that Prince Abhimanyu, son of Arjuna, became a full-fledged knight at the age of sixteen.⁸ He had been married and had already been in the battle-field. These facts show the difference that existed between theory and practice.

3 *Ibid.*, I, 89.

4 See the commentary of Naccinārkkiniyār on the Sūtram 75 Purattiyai of the *Tolkāppiyam*.

5 *Manu*, II, 37-38.

6 *Mhb.*, Droṇa Parva, 193. 66; 194. 43.

7 *Rāmāyaṇa*, I. 23. 2; III. 42. 23.

8 *Mhb.*, Ādi Parva, 68. 118.

What was the curriculum of studies planned for the Kṣatriya, and how far was the plan executed? If we are to believe the tradition recorded in the *Raghuvamśa*, the education of the prince commenced in his third year, when he learnt from his teacher the alphabet (*lipi*) and numbers (*samkhyāna*).⁹ The *Arthaśāstra* of Kauṭalya prescribes a programme of studies¹⁰ which includes *trayī* or the three Vedas, *ānvikṣiki* or logic, *vārta* or economics, and *daṇḍanīti* or the science of politics. It may be inferred that the higher studies were commenced at the age of eleven, if we are to believe the *Mānavadharmasūtra*.¹¹ It may be noted that experts in the various subjects of study were appointed teachers. It is of capital importance to note that *adhyakṣas* or heads of administrative departments and *vaktras* and *prayoktras*, expounders and administrators of law, were engaged to teach the warriors the secular sciences of economics and politics. The idea was to make the educational training as practical as it could be.

The other studies consisted of the various branches of military science, usually called *Dhanur Veda*. This particularly related to the use and handling of different arms and armaments. While the forenoon was devoted to learning the theory and practice of arms, the afternoon was devoted to the hearing of Itihāsa. The education of a Kṣatriya was not considered complete if he had not either himself studied the Itihāsas or heard them read to him. It was deemed that this study of the Itihāsas, or historical accounts of the

9 *Raghuvamśa*, III. 28.

10 *Ar. Śās.* Bk. I. 5.

11 *Manu*, II. 36.

exploits and adventures of his great ancestors, was quite essential to a young Kṣatriya, so that he might follow their example, their policy, and administration in order to achieve success for himself.¹² As the time of studentship was limited and the programme of studies was heavy and ambitious, a class of bards called Sūtas were engaged to narrate to him such stories at a certain fixed time daily. The evening and the early portion of the night were devoted to learning new and difficult lessons. The Kṣatriyas were taught in the homes of their teachers, generally away from the bustle of the town and consequently unused to a life of luxury.¹³ Education was so devised that it nurtured in them the virtue of discipline (*vidyāvinīta*).¹⁴ So much importance was attached to discipline and to obedience to teachers. Whatever the teachers wished to have in the form of *gurudakṣiṇā*, the pupils were ready to give at any cost and under any circumstance. The *Arthaśāstra*¹⁵ insists on a period of apprenticeship for the pupil which consists of learning the practical side of his

12 Cf. Sivāji's education by Dādāji Koṇḍadev in Sir Jadunath Sarkar's *Sivāji*.

13 Compare this with what prevailed in ancient and mediaeval times in the West. The castles of princes and nobles were the schools where the knight received his education from about the age of seven or eight. Instruction was provided as to how to guide a war horse, how to use the bow and the arrow, and how to manage a lance; all this by making him ride against a wooden figure. In this period he was called a squire till he was twenty. He was next 'to win his spurs', as it was called, and be admitted into the order of knighthood. (Eileen Power and G. C. Coulton).

14 *Ar. Śās.* Bk. I, 17-18; Cf. *Śukra*, II, 41-50; *Agri*, P., 225, 1-3. See also Dikshitar, *Hindu Administrative Institutions*, pp. 107-109.

15 Bk. 1, 18.

duties as a subordinate to an administrative superior. At the termination of the practical training the Kṣatriya was drafted to service and deemed worthy of occupying an independent position.

Great care was taken to promote the welfare of the individual even from birth by means of a number of sacraments, or *samskāras*. The naming of a child, to whatever caste it belonged, was considered a day of festivity and rejoicing. Only auspicious names, mostly names of their chosen gods and goddesses, were given to children. We are told in the *Maṇimekalai* how the whole city was present on the occasion of the naming ceremony of Maṇimekalai, the daughter of Mādhavi by Kōvalan. The cognomen of the name for a Kṣatriya was to be Varma, as that of the Brahman was Śarma.¹⁶ The investiture was to be celebrated at the age of eleven to entitle a Kṣatriya to style himself a *dvija* or twice-born.¹⁷

Next came the outfit of the Kṣatriyas. The sacred thread was made of hemp. The Kṣatriya wore a girdle made either of *muñja* grass with iron pieces¹⁸ tied to it or of a bow-string.¹⁹ The girdle of a Brahman was of *muñja* grass, and to distinguish it from that of a Kṣatriya, pieces of iron were added to the *muñja* grass. This seems to have been an alternative to the girdle of a bow-string, as the ancient Kṣatriya was generally a bowman. He held a staff reaching the forehead. The warrior should not carry any kind of staff, though

16 *Manu*, II, 32.

17 *Manu*, II, 36; *Gautama*, I, 13; *Āpastamba*, I, 11.18.

18 *Āpastamba*, I, 1.2-35.

19 *Vasiṣṭha*, XI, 59.

Āśvalāyana would permit it.²⁰ The staff was made of banyan or acacia wood.²¹ Every caste had its own kind of staff. But the rule was that the higher the caste the longer the staff. The height was determined by the social position of the caste.

We may next turn our attention to the dress of the Kṣatriya. The dress marked out one community from another. The under-wear of a Kṣatriya invariably consisted of a deer skin, and that of a Vaiśya of a goat skin. Except in war-time the Kṣatriya spent his time in hunting, and as a hunter he wore the deer skin. The same may be said of the Vaiśya who was an agriculturist. Flax was the material used in the making of his upper garment. The dress of the Kṣatriya consisted of an upper garment and an under garment. A cloak was also worn, and when it was worn it was dyed with madder.²² He was enjoined by the law-givers to follow special modes of dressing, building houses,²³ wearing jewels, and saluting. It is interesting to note that his salutation was made by 'extending the arm out at a level with the chest'.²⁴

Marriage formed an important part of the social life of the warrior. From a free state of marriage, as is connoted by the legend in the *Mahābhārata* of Śvetaketu, introducing regulations for marriage, counterpart of which in Tamil literature is the term *makatt-pārkāñji* in the *Tolkāppiyam*, we pass on to a settled

20 *Gṛhya Sūtra*, 1.20.1.

21 *Gautama*, I, 23; *Vasiṣṭha*, XI, 53, 56.

22 See Hopkins, *op. cit.*, 105-06.

23 *Āś. Gr. Sūt.*, II, 8.7; *Agni Purāṇa*, ch. 258.

24 *Āp.* I, 2.5-16.

social organization. The existing practices and usages were codified. Otherwise it is difficult to explain the eight forms of marriage as being prevalent. These are brāhma, daiva, āṛṣa, prājāptya, āsura, gāndharva, rākṣasa, and paisāca.²⁵ Of these the paisāca was condemned as the lowest form of marriage. To a warrior four forms of marriage are recommended—āsura, gāndharva, rākṣasa, and paisāca.²⁶ The *Mahābhārata* allows the Kṣatriyas the first six forms of marriage—brāhma, daiva, āṛṣa, prājāptya, āsura, and gāndharva.²⁷ Later on, the epic prescribes the rākṣasa form also to the kings, thus making a distinction between Kṣatriya kings and ordinary warriors. The epic is not in favour of the paisāca and āsura forms of marriage for any member of any caste. Apparently these practices were becoming obsolete at that time. The Kṣatriya kings were permitted to have the gāndharva form of marriage primarily

- 25 चतुर्णामपि वर्णानां प्रेत्य चेह हिताहितान् ।
 अष्टाविमान्समामेन स्त्रीविवाहान्निबोधत ॥
 ब्राह्मो दैवस्तथैवार्षः प्राजापत्यस्तथासुरः ।
 गान्धर्वो राक्षसश्चैव पैशाचश्चाष्टमोऽधमः ॥ *Manu*, III. 20-21.
- 26 षडानुपूर्व्या विप्रस्य क्षत्रस्य चतुरांश्वरान् ।
 विद्शूद्रयोस्तु तानेव विद्याधर्म्यान् राक्षसान् ॥ *Ibid.*, 23
- 27 प्रशस्तांश्चतुरः पूर्वान्ब्राह्मणस्योपधारय ।
 षडानुपूर्व्या क्षत्रस्य विद्धि धर्म्यानिनिन्दिते ॥
 राज्ञां तु राक्षसोऽप्युक्तो विद्शूद्रेऽवासुरः स्मृतः ।
 पैशाचमासुरश्चैव न कर्तव्यौ कदाचन ॥
 गान्धर्वराक्षसौ क्षत्रे धर्म्यौ तौ मा विशङ्किथाः ।
 गान्धर्वेण विवाहेन भार्या भवितुमर्हसि ॥ *Ādi Parva* 94.16-20.

and the *rākṣasa* form only secondarily. On this plea Duṣyanta persuaded Śakuntalā to marry him. Convinced that it was allowed by the scriptures, Śakuntalā agreed on condition that the son that should be born of her should become heir apparent. The *gāndharva* form was generally the voluntary union of a Kṣatriya with a woman of his own caste, with or without the consent of their parents. But, according to a verse in the *Anuśāsana Parva*, the *gāndharva* form is defined thus: 'The father of the girl conferred his daughter on a certain person whom she liked and who in his turn reciprocated her love, whether he liked it or not.'²⁸ The *āśura* form is to get a girl by paying a heavy price to her kinsmen, while the forcible removal of a girl by overpowering or slaying her kinsmen is said to be the *rākṣasa* form.

One thing must be mentioned. The warriors's code prescribes that the Kṣatriya could take two wives. But in practice we find that the royal harem contained a number of women. Even here we have to distinguish between the ordinary Kṣatriya and the king. Apparently the sanction to take two wives was intended for Kṣatriyas in general. It may be noted in passing that the king occupied a status superior to the ordinary warrior and enjoyed certain privileges. Of the two wives one was necessarily of his own caste. If he chose, he could take a wife from the next caste, the Vaiśya. In that case, the Kṣatriya wife was considered socially

28 आत्माभिप्रेतमुत्सृज्य कन्याभिप्रेत एव यः ।

अभिप्रेता च या यस्य तस्मै देया युधिष्ठिर ॥

गान्धर्वमिति तं धर्मं प्राहुर्वेदविदो जनाः ॥

superior to the other.²⁹ To whatever caste she belonged, it was the injunction of the scriptures that 'the husband should regard his wife as an acquisition due to his own pristine karma or to what has been ordained by God.'³⁰ This injunction falsifies the statement often made now-a-days that in ancient India women always held an inferior position in the social scale. The ancient Indian easily realized that his wife was his partner in weal or woe, and honoured her as the very queen of his home. Does not Manu say: "Where women are not honoured, there cannot be a proper home"?³¹

Marriages, then, among the warrior caste, as among the other castes, were occasions of great rejoicing, accompanied by festive processions, music and dancing. Marriages in royal families were generally occasions of public rejoicing. At the *svayamvara* marriage, all the chiefs of the land were invited and in the specially decorated hall they were seated in order. As the bride passed in front of the princes assembled, with a white garland of flowers, her lady-in-waiting would state briefly to her the name of each prince and his achievements. The prince whom she garlanded became her husband-elect. The marriage was at once celebrated in which all the rejected suitors were invited to participate: the princes did not think it in any way improper to mingle in the general festivities.³² Classical instances of a *svayamvara* are furnished by the marriage of Nala and Damayanti, and

29 *Ibid.*, 11 and 12.

30 Dutt's translation, *ibid.*, 29.

31 III. 55-60.

32 On *svayamvara* see N. K. Sidhanta: *Heroic Age in India*. pp. 151-152 (Kegan Paul, London 1929).

that of Rāma and Sītā. A study of the epics and the Purāṇas shows that polygamy was the rule, and polyandry an exception, if not altogether unknown. We have only one instance of the polyandry system, and that in the case of the five Pāṇḍava brothers having one wife Draupadī, daughter of king Drupada. But what is held virtuous and praiseworthy is the *ekapatnīvrata*, or the law of having only one consort. Dāśarathi Rāma is a typical instance of the *ekapatnīvrata*.³³ His fidelity to and love for Sītā, the incarnation of chastity, is undoubted; but when he heard that public opinion was not in favour of his taking back his devoted wife, he sent her away to the forest and separated from her.

The next point for consideration is the question of succession, and the operation of the law of primogeniture. It is a general rule that kings were chosen from among the Kṣatriya caste. In other words, a non-Kṣatriya was not qualified to be a king. And this is probably due to the fact that the Kṣatriya caste was considered superior to others in virtue of its martial prowess. For on this alone depended the maintenance of law and order without which there would be neither welfare for the people nor progress in the State, the *yogakṣema* and *lokayātra* of Indian political literature. We are told of the incalculable evils resulting from the rule of kings chosen from other than the warrior caste. The *Vāyu Purāṇa*³⁴ sets forth the dark period when slave kings ruled before Candragupta Maurya, and history again records the equally dark period under the Brahman regime, like the age of the Śungas, the Kaṇvas,

33 *Rāmāyaṇa*, III, 2. 19.

34 II. 37. 321 ff.

and the Āndhras. Ancient India again disapproved of rule by a woman or a child or by men of no character like gamblers.³⁵ It is said that such a kingdom sinks like a stone boat in a river. So insistence is made on a righteous Kṣatriya being elected king.

Generally the eldest son succeeded to the throne. His election or elevation depended on two things—recommendation by the reigning king as a well-behaved and loyal prince, and ratification by the people. Yayāti offered his throne to his youngest son, because he alone fulfilled his wishes, while others did not pay heed to them.³⁶ If the Crown Prince was a minor, the Dowager Queen or a respectable elderly relative governed in his name. A similar rule was applicable during an interregnum. For instance, in the *Rāmāyaṇa* the Purohita Vasiṣṭha took up the reins of administration on Daśaratha's death until Bharata arrived from his uncle's kingdom.³⁷ An unworthy prince was often punished and sometimes banished out of the kingdom. Asamanja is an instance in point. It may be that in certain cases the king had no issue to continue his line, and in such cases recourse was had to the practice of what is termed *niyoga*.

The son was begotten on one's wife by appointment. The practice was for the reigning king to appoint a person, preferably a sage, to have sexual intercourse with his wife and bring forth a son to succeed him. In such cases the sage imposed certain conditions, and in practice the queen often discountenanced such

35 *Mhb.*, Udyoga Parva, 38. 43.

36 *Mhb.*, Ādi Parva, 79. 18-43.

37 *Rāmāyaṇa*, Ayodhyā, chh. 68-69.

a union. But still she yielded lest the line should be completely extinguished. Legend says that Bali, the Vairocana, had no children, and appointed the sage Dīrghatamas, by whom his queen gave birth to five sons—Anga, Vanga, Kalinga, Pauṇḍra and Simha. The story goes that at first she refused and sent in her place her slave girl to whom was born Kakṣivān.³⁸ In the *Mahābhārata* again Dhṛtarāṣṭra being blind was debarred from sitting on the throne. So his brother Pāṇḍu succeeded him and Pāṇḍu became in course of time sickly, and therefore recourse was had to *niyoga* to beget sons on Pāṇḍu's queen. Though the practice of *niyoga* had neither the willing approval of the law-givers nor of the parties to it, all the same it was resorted to. And Manu assigns a low status to a *niyoga* son, nicknamed a kṣetrajā.³⁹

Details as regards the coronation, and the daily duties of the king, his mode of life, the harem, etc., need not detain us here. But our survey would not be complete if we do not say a word about the method of the disposal of kings and soldiers slain in battle. After the battle was over, and when news reached that their kinsmen had fallen dead fighting heroically in the field, the relatives including women went forth to the battlefield to bewail their loss. If it was a royal death, the royal household went to the scene of action accompanied by the merchants, artisans, agriculturists, and the common folk to pay their last respects to the departed hero. Songs of praise were sung recounting his heroic exploits.⁴⁰ Then followed the cremation.

38 *Br. Purāṇa*, III. ch. 74.

39 *IX*. 65.

40 *Mhb.*, *Strīparva*, chh. 9-10; chh. 16-24.

As hundreds of soldiers were dead on the field, it was the custom to heap up the dead bodies on pyres, according to rank, and to get them cremated.⁴¹ It was then also a custom for the chaste wives of these fallen heroes to mount the funeral pyres of their husbands and get burned along with them.⁴² Only such wives were regarded as *satis*. But this was not always the case. In the *Rāmāyaṇa* we see that widows survived their husbands and led wretched and miserable lives⁴³ and from this Lassen concludes that there was no widow-burning in the *Rāmāyaṇa*.⁴⁴ The legal code allows both practices, thus respecting the customs and usages of different peoples.

Though the warrior's code enjoins that all the Kṣatriyas should die on the field of battle,⁴⁵ still in practice many died a peaceful death. After a long and glorious rule the king often nominated his successor, invariably his eldest son, and retired with his family to the forest to lead a life of penance and prayer and attain Nirvāṇa, or Heavenly Bliss. It is a moot question whether the Kṣatriya could legally renounce the world and take to the fourth āśrama, the ascetic order or sannyāsa.⁴⁶ There is a definite ordinance of the ancient law books prohibiting the warrior caste from taking to

41 *Ibid.*, 26.24-44.

42 *Mhb.*, Śānti, ch. 147.

43 The queens of Daśaratha and Tārā the queen of Vālī are instances in point.

44 *Ind. Alt.* I. 592.

45 See in this connexion *Puranānūru*, 15.

46 There is an interesting dialogue in the *Mahābhārata* between Janaka and his indignant queen on this subject, when he renounced the world.

asceticism. Only the Brahman may resort to asceticism, because the Kṣatriya may neither beg nor receive a gift. The very nature of a sannyāsin is to beg; hence he is called a bhikṣu. Action and not renunciation is the watch-word of the Kṣatriya.⁴⁷ It was realised that if this were allowed, the Kṣatriyas would become philosophers rather than warriors and this would result in the deterioration of man-power in the land. Therefore, a warrior was not generally allowed to don the robes of an ascetic. But Mahāvira and Gautama protested against these injunctions and inaugurated an order of monks or sannyāsins. When these dissenting sects gathered in strength and numbers, the decline of Kṣatriya valour set in. Once they were initiated into a life of peace and prayer, they preferred it to the horrors of war. This was a disservice that dissenting sects did to the cause of ancient India.

The Kṣatriya could take to the third stage of life, the vānaprastha āśrama, which was the life of a hermit. But still the rule was definite, that peaceful death at home was a sin.⁴⁸ It was a disgrace for a hero to die in the field with wounds received on his back. The heroic mother of the Tamil land was in the habit of running to the field of action with a vow to cut off her breasts that gave milk to him if her son had died of a wound in the back. If, on the other hand, he had fallen dead with a wound at the chest, the mother felt relieved, even

47 Āhurāśramaṇaḥ sarve na bhaikṣam kṣatriyaścaret—(*Mhb.*, Udyoga Parva 72.3).

48 *Mhb.*, Śānti, 97.21-30. The following statement may be specially noted:

न गृहे मरणं तात क्षत्रियाणां प्रशस्यते ॥

though she should have lost her only son.⁴⁹ When kings received wounds on their backs they sought a voluntary death. We hear that the Cēra king, Ātan II, when wounded thus by Karikāl Cōla, sought a voluntary death.⁵⁰ The idea of death at the theatre of war was such a ruling passion with the Tamils that if a warrior met with a natural death it was the custom to make the dying man lie on a bed of kuśa grass and have him cut with a sword, the purohita chanting special mantras. In short, war was deemed to be a yajña or sacrifice, and this idea of the dramatist Bhāsa is found in Kauṭalya.⁵¹

The warrior's code enjoined that, once challenged, the Kṣatriya must respond.⁵² If he did not, he was not doing his duty. It is said that having heard that he had been challenged to fight, a Kṣatriya laid down his crown and braided up his hair, an outward sign of hasty preparation for the fight.⁵³ He thus extricated himself from disgrace and from the sin arising out of the non-observance of duty. For the king must always be in a state of preparedness for war. It made no difference

49 *Śen Tamil*, Vol. v. For it is un-Aryan to mourn for the heroic dead. The rule forbids the lamentation for those slain in battle except in a formal way. *Mhb.*, XI. 2.19.20.

50 *Puram*, 65 and 66. It may be said most of these rules are borrowed from or inspired by the Brahmanical tradition.

51 Bhāsa's *Pratijñāyauḡandharāyana*—Act IV; *Ar. Śās.* Bk. X, 3. See also Dikshitar—*Bhāsa and Kauṭalya* in P. V. Kane Commemoration Volume (1941).

52 For a similar idea see Strachey's Introduction to the Globe edition of Malory's *Mort d' Arthur, on Chivalry* and the introduction to the Globe edition of Froissart.

53 *Mhb.*, Sabhā Parva, 24.8.

whether one expected to win or to be killed in the battle. For it was the eternal law proclaimed by the Creator.⁵⁴

Whether an elder, a kinsman, a preceptor, or a Brahman, he must be attacked if he would attack him.⁵⁵ This was the point raised by Arjuna and answered by Kṛṣṇa as the veritable law of warfare, though it militated against the sādharma dharma inculcated by the law codes. The idea was that once a Brahman or a kinsman assumed the role of a warrior and a foe, there was no sin in killing him.⁵⁶

Viewing the life of a warrior as a whole, it seems that in the pre-Epic period he shared a part of the spoils of war with the king and received no fixed wages. But in the epic period a warrior in service received fixed emoluments. In war he fought, and in peace he spent his days in amusement. He was not drafted to civil work.⁵⁷ In case a warrior died, the State provided for his family.⁵⁸

54 *Mhb.*, Udyoga Parva, 72.4.

जयो वधो वा संग्रामे धाताऽऽदिष्टः सनातनः ।

स्वधर्मः क्षत्रियस्यैष कर्पण्यं न प्रशस्यते ॥

55 Cp. Av. Bk. 1.19.3 where Rudra is invoked to destroy the enemy: 'Whether one of our own or whether a stranger, fellow or outsider, who so assails us.—let Rudra with a volley pierce those my enemies.'

56 *Mhb.*, Udyoga Parva, 178.51.

उद्यतेषुमथो दृष्ट्वा ब्राह्मणं क्षत्रवन्धुवत् ।

यो हन्यात्समरे क्रुद्धं युध्यन्तमपलायिनम् ।

ब्रह्महत्या न तस्य स्यादिति धर्मेषु निश्चयः ॥

57 *Ibid.*, Sabhā Parva, 5.52-3.

58 *Ibid.*, Śānti, 86.24-5.

SECTION II

THE ETHICS OF WAR

“To fight to the death for these great possessions (defence of family’s honour and of country’s welfare), to feel that it is honour to die for them and dishonour to retreat from them, to give up everything material for them, to war for them to the last man, is just, true and righteous war, and there is not a thought or a passion connected with it which does not exalt and ennoble, not only the persons and the nation which wage it but the whole body also of humanity to whom the great tradition of this defence is handed down, and whom the memory of it inspires, teaches and ennobles”⁵⁹

The Hindu science of warfare values both *nīti* and *śaurya*, i.e. ethical principles and valour. The term *nītiśāstra*, which was the title given to books on ancient Indian polity, shows that though the subjects treated in them were secular, still they had their basis in religion. In fact religion governed the actual life of every person from birth to death. It was therefore realised that the waging of war without regard to moral standards degraded the institution into mere animal ferocity.⁶⁰ Hence there came into being the ethical code and the code of the lawgivers, the authors of the Dharmasūtras and the Dharmaśāstras. A monarch desirous of *dharma-vijaya* should conform to the code of ethics enjoined upon warriors.

59 See Stopford A. Brooke: *A Discourse on War*, (*The Hibbert Journal*, 1915-16, p. 674).

60 *Raghuvamśa*, 17. 47 and 68; See Mallinātha’s Commentary.

Hindu military science recognizes two kinds of warfare—the dharmayuddha and the kūtayuddha. There is another classification into prakāśayuddha and mantra-yuddha. Dharmayuddha is war carried on the principles of *dharmā*, meaning here the Kṣatradharma or the law of Kings and Warriors. In other words, it was a just and righteous war which had the approval of society. It was also termed prakāśayuddha, or open battle. There was to be no secrecy about it. The preliminaries of the battle were settled by the belligerents before the war actually began. There was no application of stratagem or artifice in the operations of this war. It was then a straight fight and a regulated fight. On the other hand, the kūtayuddha was unrighteous war. It was a crafty fight carried on in secret. It was sometimes effected by the use of *mantras* and of charms and spells. Sometimes it went by the name of mantra-yuddha, permissible only for purposes of defence, and that too only as a last resort. More of this later on.

Going back to the hoary past, to the period of the *Ṛg Veda Samhitā*, there is no reason to suppose that the Samhitā or post-Śāhmitā literature of the Veda contemplated any clear distinction between dharmayuddha and kūtayuddha. No doubt wars were fought, and there is evidence of the use, sometimes, of fraud in such battles.⁶¹ There was nothing like a definite formulation of the rules of conduct. It was only in the post-Vedic epoch that a code came into being, thanks to the foresight of our ancient sages. Here and there we meet with a stray regulation especially in the

61 *Ṛg Veda*, I, 117. 16; VII, 18.11.

literature which goes by the name of the Brāhmaṇas. For example, the Kauṣītaki Brāhmaṇa says: 'Kin or no kin, crush the foes: conquer the attacking, conquer by attacking'.⁶² Surely there was some unwritten code or convention followed by the members of society, though the written code was still a thing of the future.

But a critical study of the Vedic literature as a whole leaves on one the impression that the Asuras were advanced in the art of war, that they lived in well-fortified castles, and that they sometimes resorted to unscrupulous and unclean methods to overcome the enemy. They were past masters in the use of spells and charms, *mantra* and *tantra*. If we read the accounts of the different devāsura wars narrated in the Vedic works and amplified in the later Purāṇic literature, we may surmise, not without reason, that the origin of the kūṭa-yuddha, later on accepted by the Hindu law-givers as one of the permitted kinds of warfare, lay in the ancient and primitive institutions of the Asuras, which the Devas began slowly to copy and follow. However this may be, we meet with these two kinds of war in the early Dharma-sūtras and in the epics. Already a code had been drawn up without much violation of the politics and conventions current at that time. And punishment was inflicted on the warrior who did not act up to the regulations laid down. The code of course synchronized with the formation of a separate military caste. Though it was enjoined on the military leaders and warriors to conform to the laws of war, still they were taught the different modes of fighting, including those of the

kūṭayuddha,⁶³ and were expected to be well versed in all of them. The idea was to pay one in his own coin. If the enemy resorted to unrighteous and intriguing methods of war, the attacked could also resort to similar methods and strike the enemy down.

The principles regulating the two kinds of warfare are elaborately described in the Dharmasūtras and Dharmaśāstras, the *epics*, and the Arthaśāstra treatises of Kauṭalya, Kāmandaka, and Śukra.

Let us now turn our attention to the laws governing righteous warfare. When a conqueror felt that he was in a position to invade the foreigner's country, he sent an ambassador with the message: 'Fight or submit.'⁶⁴ More than 5000 years ago India recognized that the person of the ambassador was inviolable. This was a great service that ancient Hinduism rendered to the cause of international law. It was the religious force that invested the person of the herald or ambassador with an inviolable sanctity in the ancient world; we find this principle operative at the dawn of Greek society.⁶⁵ Plato asserts that an injury done to the ambassador amounted to sacrilege against Zeus and Hermes. The same principle dominated the religious law of early Rome. Herodotus narrates the divine punishment that fell on Sparta in the fifth century B.C. for slaying the

63 This is called *adharma vijaya* by the epic. The *vijaya* earned by *adharma* leads to hell. Śānti: 96. 1-2.

अधर्मविजयं लब्ध्वा को नु मन्येत भूमिपः ।

अधर्मयुक्तो विजयो ह्यधुवोऽस्वर्ग्य एव च ॥

64 For details see the section on Ambassadors.

65 Plato, *Laws*, 941.

Persian herald.⁶⁶ 'Thus it was that religion was able to win recognition for one of the most enduring ideas of international ethics.'⁶⁷ The *Mahābhārata* rules that the king who killed an envoy would sink into hell with all his ministers.⁶⁸

Notwithstanding the love of glory and the spirit of heroism which actuated the warrior, recourse was had to war only if the instruments of diplomacy failed to effect the desired end. Generally the policies of *sāma* and *dāna* were used against inferior powers, and that of *bheda* and *danḍa* towards superiors and equals.⁶⁹ But this was by no means a rigid rule.⁷⁰ These different expedients were severally and jointly employed so as to bring about a compromise and avoid or at least postpone the outbreak of war. Genuine attempts were made to avoid armed contests and to keep peaceful relations. As we have seen already, aggression was the exception and defence was the rule. If diplomacy failed to bring about compromise, and if war was provoked, surely there was retaliation. Vigorous preparations were made to vanquish the enemy by attacking the vulnerable points in his line. It was considered no sin to strike the enemy at his weak points.⁷¹ We have the unimpeachable authority of the celebrated Buddhist writer of the early second century A.D., Āryadeva, to this effect. In the *Catuh-*

66 7. 134.

67 See L. R. Farnell: *The Higher Aspects of Greek Religion* (London, 1926), pp. 100-101.

68 Śānti, 85. 26.

69 *Manu*, 7.198; Śānti, 94 (whole); Śukra., IV. 1. 25-37; *Ar. Śās.* VII. 16.

70 See chapter on *Diplomacy and Diplomatic Agents*.

71 *Kāmandaka*, 20.57.

śatika, reconstructed and edited by the late lamented Haraprasad Śāstri, the following stanza occurs:

छिद्रप्रहारिणः पापं यदि राज्ञो न विद्यते ।

अन्येषामपि चौराणां तत् प्रागेव न विद्यते ॥

Ch. IV. 91.

(See Memoirs of A.S.B., Vol. III, No. 8).

What does this indicate? Taking advantage of the weak spots in the enemy's army and directing attack on them had the approval even of the Buddhist's ethical code.

War meant victory or defeat. The warrior would either come out victorious or be slain in the contest. No one would prefer the latter. To earn a victory was the ruling passion. It was believed that that could not be effected by mere physical strength or assertion of might. But if the human endeavour was backed by divine power (*daiva balam*), then it was thought that success would attend on him. Hence throughout the week preceding the march the king should spend his time, in prayers to God. On the first day he should worship Hari, Śambhu and Vināyaka; on the second the Loka-pālas; on the third the other deities; on the fourth the planets; on the fifth the Aśvins, the presiding deities of the rivers, mountains, trees and other objects; and on the last two days Narasimha and also war animals and weapons.⁷²

This compares favourably with the Tamil practice. When Śenguṭṭuvan resolved to march against the northern kings, the astrologer announced the auspicious time, when the king caused the sword and the umbrella

⁷² *Agni Purāṇa*, Ch. 236; Cf. *Śivatattvaratnākara*, 5.14; 8.24. This continued to be in vogue to the end of the Vijayanagar period.

to be taken outside the city ramparts as *prasthāna*. Then he went to the shrine of Śiva and took the prasādam on his head after due prayers. That which came from the Viṣṇu temple he wore on his shoulders. After entertaining the whole army to a sumptuous dinner and with words of encouragement to the soldiers, the king commenced his march towards the Ganges.⁷³

At the completion of the week preceding the outbreak of war, the king, the minister, and the Purohita addressed words of encouragement to the warriors drawn in several arrays. This practice is known also to Bhāsa who mentions it in his *Pratijñāyugandharāyana*.⁷⁴ The war is here compared to a yajña or Vedic sacrifice, and he who fights to the end enjoys the same benefits as would accrue from the performance of a Vedic yajña. In the Udyoga Parva of the *Mahābhārata*, mention is made of a śāstra yajña or the sacrifice of arms where Kṛṣṇa officiated as Ādhvaryu, Yudhiṣṭhira as Brahmā, the blood of warriors and their powers as the clarified butter, the pupils of Droṇa and Kṛpa as the Sadasyas, the son of Dhṛtarāṣṭra as the Yajamāna, and the avabhṛta bath of the sacrifice was the lamentation over the killing of Duryodhana by the mighty Bhīmasena.⁷⁵ This affords strong proof of the fact that the concept of sacrifice was carried to excess. War itself was personified as yajña. It was then deemed that both war and Vedic sacrifice resulted in the same effect, viz., the attainment of heaven.⁷⁶ It was Vīrasvarga to the

73 *Śīla*. Canto. XXVI.

74 See p. 56 above; *Mhb.* Śānti. 100, 32-41; Cp. Banerji's *Public Administration in Ancient India*; also *Ar. Śās.* X. 3.

75 Ch. 141. 29-51.

76 Śānti, 98. 39 to the end.

warriors slain in war. Killing in war and being killed in war were not acts of unrighteousness. Death otherwise was not commendable.⁷⁷

The warrior's code ruled that on the day before the battle the king should sleep in his chariot with his weapons by his side. Astrologers and soothsayers observed the various omens and predicted the good or bad results foretold by them.⁷⁸ The king was asked to begin his march at an auspicious hour, after satisfying himself with regard to the strength of the forces and the attendant circumstances. If the omens brought with them good signs, the kings were to give certain peace offerings (*śānti*), for, according to the belief of the time, these propitious rites were likened to an armour shielding the warrior from a volley of arrows.⁷⁹

Varāhamihira's *Yogayātrā*⁸⁰ asks a king on the eve of a march to war to recite the *apratiratha* hymn that occurs in the *Atharvaveda*, for success in war.⁸¹ The hymn runs as follows:

(1) Indra's two arms (are stout), virile (*vṛṣan*) these two wondrous successful bulls; them will I first yoke when the conjecture (*yoga*) arrives—they by which was conquered the heaven (*svar*) that is the Asuras.

(2) Swift, sharp, terrible like a bull, greatly smiting, disturber of men, roaring, unwinking, sole hero, Indra conquered a hundred armies together.

(3) With the roaring, unwinking, conquering,

77 *Ibid.*, 97. 25, 28 and 32.

78 *Ar. Śās.* X, 113.

79 *Matsya Purāṇa*, Ch. 288.

80 8.6.

81 *Bk. XIX.* 13.

invincible, immovable, bold one—with Indra thus conquer, thus over-power the fighters, O men, with the arrow-armed bull (vr̥ṣan).

(4) He with the arrow-armed, he with the quiver-hung (is) controller; he, Indra with his train, brings together the fighters—(he) conquering those brought together, soma-drinker, defiant with his arms, of formidable bow, shooting with fitted (arrows).

(5) To be known by his strength, stout, foremost hero, powerful, vigorous (vajin) overpowering, formidable, excelling heroes, excelling warriors, conquering with power-mount, O Indra, the victorious kine-winning chariot.

(6) Be ye excited after this formidable hero; take hold, O companions, after Indra, the troop-conqueror, kine-conqueror, thunderbolt-armed, conquering in the race, slaughtering with force.

(7) Plunging with power into the cow-stalls, Indra, pitiless, formidable, of hundred-fold fury, immovable, over-powering fighters, invincible—let him favour our armies in the fights.

(8) O Br̥haspati, fly about with thy chariot, demon slaying, forcing away our enemies; breaking up our foes, slaughtering our enemies, be thou the helper of ourselves.

(9) Indra (be) their leader: let Br̥haspati the sacrificial gift, the sacrifice, soma, go in front; in the midst of the smashing conquering armies of the gods let the Maruts go.

(10) Of Indra the bull (vr̥ṣan) of King Varuṇa, of the Ādityas, of the Maruts, the spirit (sārdhas) (is) formidable; the noise of the great minded, creation-stirring, conquering gods hath arisen.

(11) Indra (is) ours when the banners meet (in

conflict); let the arrows that are ours conquer; let our heroes be superior; us, O Gods, aid ye, at the invocations.

After this it was the custom of the Purohita to arm the king with a breastplate in the course of which he recited the hymns found in the *Atharvaveda* (Bk. XIX, 20) invoking protection to him by the various gods.

The following are some of the rules which were observed on the battlefield. In this there is no difference between the epic code and the law-code.⁸²

1. A warrior in armour must not fight with a Kṣatriya who is not clad in a coat of mail.

नासन्नद्धो नाकवचो योद्धव्यः क्षत्रियो रणे । Śānti, 95.7.

2. One should fight only one enemy, and cease fighting when the opponent became disabled.

एक एकेन भाव्यश्च विसृजेति क्षिपामि च । Ibid.

3. If the enemy is clad in mail, his opponent should put on armour.

स चेत्सन्नद्ध आगच्छेत्सन्नद्धव्यं ततो भवेत् ।
स चेत्ससैन्य आगच्छेत्ससैन्यस्तमथाह्वयेत् ॥

Ch. IV.91. Śānti, 96.3

स चेन्निष्कृत्या युध्येत निष्कृत्या प्रतियोधयेत् ।

अथ चेद्धर्मतो युध्येद्धर्मणैव निवारयेत् ॥ Ibid., 8-9.

4. A cavalry soldier should not attack a chariot-warrior. But a chariot warrior could attack a chariot-warrior. Similarly a horse-warrior could resist another horse-warrior. The general rule is that warriors should fight only with their equals.

नाश्वेन रथिनं यायादुदियाद्रथिनं रथी ।

व्यसने न प्रहर्तव्यं न भीताय जिताय च ॥

Ibid., 10.

5. Poisoned or barbed arrows should not be used.⁸³

नेषुर्लितो न कर्णी स्यादसतामेतदायुधम् ।

यथार्थमेव योद्धव्यं न क्रुध्येत जिघांसत ॥

नास्त्येकस्य गजो युद्ध गजश्चैकस्य विद्यते ।

न पदातिर्गजं युध्येन्न गजेन पदातिनम् ॥

हस्तिना योधयेन्नागं कदाचिच्छिक्षितो ह्यः ।

दिन्यास्त्रावलसंपन्नः कामं युध्येत सर्वदा ॥

नागे भूमौ समे चैव रथेनाश्वेन वा पुनः ॥

Ibid., 11-13.

6. A weak or wounded man should not be killed, nor one who has no son.

7. He whose weapon is broken, or whose bow-string is cut, or who has lost his car should not be hit.

8. A warrior who requests to be rescued saying ' I am thine ' or joins his hand in supplication, or throws off his weapon, must not be killed. But he can be captured as a prisoner of war.⁸⁴

विशीर्णकवचं चैव तवास्मीति च वादिनम्

कृत्वाञ्चलिं न्यस्तशस्त्रं गृहीत्वा न विहिंसयेत्

9. A king should fight only with a king and not with warriors of inferior status.

राज्ञा राजैव योद्धव्यः तथा धर्मो विधीयते ।

नान्यो राजानमभ्यस्येदराजन्यः कथंचन ॥

Śānti, 96.7.

83 Cp. *Bauddhāyana Dharma Sūtra*, I. 10, 10.

न कर्णिभिः न दिग्धैः प्रहरेत् ।

84 *Śānti*. 96.3.

10. If a Brahman enters the field to bring about peace between the contesting parties, both should stop fighting. And no injury should be inflicted on such a Brahman.

अनीकयोः संहतयोर्यदीयाद्ब्राह्मणोऽन्तरा ।

शान्तिमिच्छन्नुभयतो न योद्धव्यं तदा भवेत् ॥

Ibid., 8.

11. He is a wretch who retreats stricken with fear from the field of battle.⁸⁵

12. One should never lament over a hero killed in battle, for he becomes the lord of thousands of nymphs.⁸⁶

आहवे तु हतं शूरं न शोचेत कथंचन ।

अशोच्यो हि हतः शूरः स्वर्गलोके महीयते ॥

वराप्सरःसहस्राणि शूरमायोधने हतम् ।

त्वरमाणानि धावन्ति मम भर्ता भवेदिति ॥

Ibid., 98.70-72.

13. Aged men, women, children, the retreating, or one who holds a straw in his lips as a sign of unconditional surrender,⁸⁷ should not be killed.

वृद्धबालौ न हन्तव्यौ न च स्त्री नैव पृष्टतः ।

तृणपूर्णमुखश्चैव तवास्मीति च यो वदेत् ॥

Ibid., 74. *Baudhā*, 1.10.18.

14. The panic-stricken and scattered foe should not be pursued hotly.⁸⁸

न हि प्रहर्तुमिच्छन्ति शूराः प्रद्रवतो भयात् ।

तस्मात्पलायमानानां कुर्यान्नात्यनुसारणम् ॥

Ibid., 99.14.

85 Ch. 97. 19-20.

86 *Ibid.*, 98. 70-72.

87 *Ibid.*, 74.

88 *Ibid.*, 99. 13-14.

15. No one should kill the sleepy or the thirsty, or the fatigued, or one whose armour had slipped, a peaceful citizen walking along the road, one engaged in eating or drinking, the mad and the insane, one who went out of the camp to buy provisions, a camp-follower, menials and the guards at the gates.⁸⁹

16. In case of an insufficient supply of numbers in a particular division or divisions of the army, substitutes may be used. An elephant may be opposed by five horses, or fifteen men and four horses; one horseman may be opposed by three footmen and three horsemen by one elephant rider.⁹⁰

17. It is forbidden to kill a Brahman by caste or by profession, or one who declares himself a Brahman, or a cow, or an outcaste.⁹¹

18. He should not be killed who gets up on an eminence or a tree, who is an eunuch or a war-musician.⁹² The *Śilappadikāram* refers to warriors escaping from the field of battle in disguise as ascetics, Brahmans, musicians, and, last but not least, hermaphrodites. Most of them were allowed to run away, though some were captured and sent to far-off lands. When these captives

89 *Ibid.*, 100. 27-9; *Manu*, VII. 92.

90 *Agni Purāṇa*, 242, 38.

91 प्रसुप्तांस्तृषिताञ्चान्तान्प्रकीर्णान्नाभिघातयेत् ।

मोक्षे प्रयाणे चलने पानभोजनकालयोः ॥

न दोषो हिंसायामाहवेऽन्यत्वाश्वसारथ्यायुधकृताञ्चलि-

प्रकीर्णकेशपराङ्मुखोपविष्टस्यलवृक्षारुढदूतगोब्राह्मणवादिऽयः

Gautama, X.

92 *Manu*, VII. 90-93; *Gautama*, X. 18-20; *Yāj.*, I, 327-28; *Āpastamba*, II, 5.10; *Śivatattvaratnākara*, 5.14.16; *Śukra*. 4-7-355-65; *Śārāṅgadharma* 1935 f; *Bārhaspatya*. III. 51.

were presented before the Pāṇḍya and Coḷa monarchs the latter spoke disparagingly of Śenguttuvan as having transgressed the limits of fair fighting (CH. XXVI).

19. It is further prohibited to fight those who do not offer to fight, who hide themselves in fear or who go to the field as spectators.⁹³ The great war at Kurukṣetra affords ample proof that spectators were admitted into the battle-field during the scene of action, and they were not injured or otherwise harmed.

20. Another feature of the dharmayuddha was to leave the fruit and flower gardens, temples, and other places of public worship unmolested.⁹⁴ Clausewitz characterises such a direction of war as the necessary consequence of the spirit of progress.⁹⁵ We have the testimony of a foreign ambassador to this country in the fourth century B.C. Megasthenes says: 'Whereas among other nations it is usual in the contests of war to ravage the soil and then reduce it to an uncultivated waste, among the Indians, on the contrary, by whom husbandmen are regarded as a class that is sacred and inviolable, the tillers of the soil, even when battle is raging in their neighbourhood, are undisturbed by any sense of danger from the combatants and either side in waging the conflict make carnage of each other but allow those engaged in husbandry to remain unmolested.'

93 *Rāmāyaṇa*, Yuddha, 80.39;

नैकस्य हेतो रक्षांसि पृथिव्यां हन्तुमर्हसि ॥

अयुध्यमानं प्रच्छन्नं प्राञ्जलिं शरणागतम् ।

पलायन्तं प्रमत्तं वा न त्वं हन्तुमिहार्हसि ॥

94 *Agni Purāṇa* 236. 22. See also the testimony of Megasthenes.

95 Op. Cit. Vol. III, pp. 98-9.

Besides they neither ravage an enemy's land with fire nor cut down its trees.' Nor would an enemy coming upon a husbandman at work on land do him harm, for men of this class, being regarded as public benefactors, are protected from all injury.⁹⁶

We must specially emphasize this social aspect of war. In modern war the normal course of individual and commercial life is greatly disturbed. Trade is hampered and prices rise enormously. In a word, non-combatants are as much affected as combatants. This stands in contrast with the theory and practice of war in ancient India. The normal life of the people was never disturbed and arts and crafts continued to flourish irrespective of war or peace.

21. Prisoners of war were generally to be accorded generous treatment. In the epoch of the Brāhmaṇas the fettered prisoner was sent out of the kingdom and was permitted to remain on the outskirts. Sometimes the captive agreed to become a slave of the captor for a period of one year after which he became a free man.⁹⁷ If maidens were among the prisoners of war, they were courteously treated and were induced to marry persons of the conqueror's choice. If they declined the offer, they were sent back to their homes under proper escort.⁹⁸ Hospitality, the sacredness of the refugee, the law not to

96 *Ar. Śās.*, XIII. 4; McCrindle, *Frq.* I.

97 *Śat. Br.*, I. 2.4. 16-17 (SBE, XXII); Śānti, 96.4-5.

बलेन विजितो यश्च न तं युध्येत भूमिपः ।

संवत्सरं विप्रणयेत्तस्माच्चातः पुनर्भवेत् ॥

98 Śānti. 96. 5. We are told in the later Vijayanagar period that Kṛṣṇadeva returned the wife of the defeated Gajapati ruler. (Sewell, *A Forgotten Empire*, p. 320).

forget a kindness or a hurt, and not to refuse to fight when challenged, are some features of fair fighting according to the epic code.⁹⁹ According to the *Mudrārākṣasa*, Kauṭalya-Cānakya set free prisoners captured in war by Candragupta. Kanaka and Vijaya, the northern kings who were taken captives in the Ganges expedition, were liberated by Śengutṭuvan after some time and sent back to their capitals.¹⁰⁰

Usually the defeated king was reinstated on the throne. But if the enemy king had met with his death in battle, his son or nearest relative was installed on the throne on terms of subordinate alliance.¹⁰¹ The subjects of the vanquished monarch were allowed to retain their own laws and customs,¹⁰² for it was well realised that any violation of these would result in a mass rebellion which it would be impossible to quell. The chief leaders of the people were, it is said, to be conciliated with soothing words and alluring presents.¹⁰³ It was the policy of the ancient Hindus that once in the field of action, the enemy could be subjected to rigor. But after the cessation of hostilities, the victor should behave in such a way as to secure the advancement of all, including the subjects of the enemy's kingdom.¹⁰⁴

Some of these rules are borne out by the inscriptions. Different cases of dealing with the conquered kings are mentioned in the Allahabad pillar inscription

99 See *Indian Historical Quarterly*, Vol. I, p. 270.

100 *Śīla*., Canto XXX.

101 *Ar. Śās.*, VII, ch. 16; *Manu*, VII, 202 ff.

102 *Ibid.*, XIII. ch. 5.

103 *Śānti.*, 96.12-13.

104 *Ibid.*, 97. 4-5.

of Samudragupta. It is said that the Dakṣiṇāpatha rulers who were captured in his wars, were set free and the Āṭavika kings were admitted to the service of the conqueror. The sāmanta chieftains, on the other hand, expressed their willingness to accept the emperor's overlordship by agreeing to pay him tribute.¹⁰⁵ It is thus seen that as far as possible the internal system of administration and the various social institutions of the subjugated lands were left undisturbed. The conqueror, in most cases, was satisfied with the acknowledgment of his overlordship and did not trouble himself so long as his sovereignty was not challenged.¹⁰⁶

22. Next the treatment of the wounded may engage our attention. A wounded opponent should either be sent to his own home, or if taken to the victor's quarters, he should have his wounds attended to by skilled surgeons. After he got well cured, he should be set at liberty.¹⁰⁷ Women were appointed to nurse the wounded. In the camp were found physicians with surgical instruments, machines, remedial oils, and bandage-cloth in their hands. Evidently they dressed the wounds and applied healing remedies. After beating the enemy in battle and finding them suffering from the agony of wounds, the victor should show mercy to them and sympathise with them by comforting them, taking hold of their hands affectionately. It is said that he

105 *Gupta Inscriptions*, No. I, Pl. 1, l. 19.

106 *Viṣṇu*, III, 30-31; Jayaswal: *A History of India A.D. 150—A.D. 350* (re. the nature of Samudragupta's conquests).

107 *Śānti.*, 95.17-18.

चिकित्स्यः स्यात्स्वविषये प्राप्यो वा स्वगृहे भवेत् ।

निर्व्रणश्च स मोक्तव्यः एष धर्मः सनातनः ॥

should even shed tears before them so as to secure their devotion.¹⁰⁸ This was true of the soldiers of his own army as well as of the enemy.¹⁰⁹

That the ancient Tamil kings were imbued with such lofty ideals and were solicitous for the wounded and the disabled is sufficiently manifest. The great Śāṅgam poet, Nakkīrar, describes how king Neḍuñjēliyan II behaved towards the wounded soldiers in his camp. At mid-night, despite the inclement weather and drenching rain, the king left his camp followed by a few attendants holding lighted torches and visited these suffering men and made kind and sympathetic enquiries of each soldier. Usually a general went in advance pointing out to the king the heroic men wounded in the previous day's battle.¹¹⁰

Incidentally, it may be noticed from the above description that it was a custom to make war during the day and cease fighting during night. This was also the practice in the *Mahābhārata* war and a practice of all righteous wars. According to Clausewitz,¹¹¹ when the army retired for rest all feelings of asperity and animosity were to be suspended and both the contending parties were to behave like allies.

SECTION III

CELEBRATING VICTORY

After the announcement of victory, the conqueror probably recited the following hymn of the *Atharva*

108 Śānti., 102, 34-39.

109 *Ibid.*, 95, 17, 18.

110 *Pattuppāṭṭu*, Neḍunalvāḍai, 11.169-188. See also Dikshitar: *Studies in Tamil Literature and History*, p. 254; *J.I.H.*, Vol. XIII, Pt. 2—J. M. Somasundaram has translated this into English.

111 Vol. I, p. 231.

Veda which Griffith calls a 'hymn after victory':—

'Here I have come up to a better stop: heaven-and-earth have been propitious to me: let the directions be for me free from rivals: we verily hate thee not; be there fearlessness for us.'¹¹²

Then he celebrated it by worshipping the gods, honouring the Brahmans, and granting a general amnesty.¹¹³ The belief then was that God helped those who helped themselves. So worship of the gods was the first thing. This worship was done in different ways. The orthodox method seems to have been to celebrate a sacrifice as we saw in the cases of Yudhiṣṭhira and Śengutṭuvan. There was the classical instance of King Nābhāga giving away whole kingdoms as sacrificial presents to the Brahmans.¹¹⁴ Another mode of honouring the Brahman was to make a present of the cows captured from the enemy so that they might enjoy their milk.

An interesting question may be raised here. What was the service of the Brahman in a war so as to make him the recipient of such gifts? Let the ancient texts answer. A certain Gandharva in addressing Arjuna in the *Mahābhārata* on the importance of the Purohita to the king says that sheer prowess and pride of nobility cannot give one success. It is the guiding hand of the Brahmans that will keep a king ever victorious.¹¹⁵ In

112 Bk. XIX, 14.

113 *Manu*, VII. 201; *Ar. Śās.*, XIII. 5.

114 सराजकानि राष्ट्राणि नाभागो दक्षिणां ददौ ।

अन्यत्र श्रोत्रियस्वाच्च तापसार्थाच्च भारत ॥

Śānti., 96.22.

115 *Mhb.*, Ādi Parva, 186. 77-84. and especially the line

ब्राह्मणप्रमुखं राज्यं शक्यं पालयितुं चिरम् ॥

another place we are informed that mere strength of weapons and arms (*astrabāhubalam*) does not secure victory, but the power of tapas and mantras would alone lead to it (*tapomantra balam*).¹¹⁶ This is exactly what the Kauṭaliya rules namely śāstrabalam combined with śāstrabalam leads to the success of the State.¹¹⁷ As the *śāstrabalam*, and *tapomantrabalam* were the possession of the Brahman, and as he was prohibited from earning his livelihood by taking to other professions, there is the justification for bestowing lavish gifts on the Brahmins who ministered to the religious and spiritual needs of the whole community. This dependence of each community on the other explains why there were few or no civil wars in ancient India.

After the religious celebration the conqueror proceeded to distribute the booty seized in war. It included chariots, horses, elephants, umbrellas, grain, cattle, drav-yas including the *kupyas* or baser metals, and women. Such wealth consisted only of movables. The epic code has it that the immovable property did not of right belong to the conqueror.¹¹⁸ It is said that after defeating the enemy in battle, King Pratardana took all his wealth, including grains and medicinal herbs,

- 116 तपोमन्त्रबलं नित्यं ब्राह्मणेषु प्रतिष्ठितम् ।
 अस्त्रबाहुबलं नित्यं क्षत्रियेषु प्रतिष्ठितम् ॥
 नाब्रह्म क्षत्रमुच्चोति ना क्षत्रं ब्रह्म वर्धते ।
 ब्रह्मक्षत्रं च संपृक्तमिह चामुत्र वर्धते ॥

117 *Ar. Śās.*, Bk. I. 9.

118 भूमिवर्जं धनं राजा जित्वा राजन्महाहवे ।
 अपि चाक्षोषधीः शश्वदाजहार प्रतर्दनः ॥

but left his land untouched. In the next verse it is told that King Divodāsa took away even the sacrificial materials including the clarified butter and food of his subjugated foes. But this was not approved as it went against the prevailing religious feeling.¹¹⁹ According to Śukrācārya¹²⁰ the wealth seized in war should be presented to the king for examination and distribution. This wealth was clearly movable property. According to lawgivers like Viṣṇu and Manu, animals captured and a part of the treasure seized, generally went to the king.¹²¹ It is interesting to note the ruling of Bṛhaspati that one-sixth of the booty went to the king and the rest to his allies and soldiers.¹²² The dependants of those killed in war were given an allowance for subsistence. This was probably met from the State treasury.

SECTION IV

MISCELLANEOUS REGULATIONS

There are a number of miscellaneous rules given in the epic under the category of just fighting. Let us refer to one or two of these. That warrior was regarded as Viṣṇu in prowess and Bṛhaspati in intelligence who killed the commander of the enemy's force and rode upon the chariot of his fallen antagonist.¹²³ The epic speaks

119 *Ibid.*, 21.

120 IV, 7, 386.

121 *Viṣṇu*, III. 30; *Manu*, VII. 202; *Gautama*, X, 20-23.

122 *SBE.*, XXXIII, p. 341.

123 Śānti, 98. 68.

यस्तु सेनापतिं हत्वा तद्यानमधिरोहति ।

स विष्णुविक्रमकामी बृहस्पतिसमः प्रभुः ॥

highly again of him who could capture alive the commander of the opponent's army, or his son, or some high-placed general.¹²⁴ Victory or defeat practically rested with these commanders and generals, who were the leaders in war. This is why so much importance is attached to capturing alive or slaying a general of the army. The Chinese traveller, Hiuen Tsang, records a tradition: 'Whenever a general is despatched on a war-like expedition, although he is defeated and his army destroyed, he is not himself subjected to bodily punishment, only he has to exchange his soldier's dress for that of a woman, much to his shame and chagrin. So mostly those men put themselves to death to avoid such disgrace.'¹²⁵

Another was to cut off supplies from the enemy, especially if they were contraband. Harbour officials had, according to the *Arthaśāstra*, the right of seizing or destroying seaborne goods in ships bound for the enemy's country. This holds good for piratical vessels, though the property thus seized was restored to the owner.¹²⁶ In this, as in so many of his injunctions, the practical statesman Kauṭalya anticipates modern times.

If a digression is permissible, we may say that in the Buddhist and Jaina literature we notice the same war ethics. Buddhist literature contains no treatises on *nīti* or polity except the stray references we meet in books devoted to other topics. But there are two Jain works very important for purposes of our present study.

124 नायकं तत्कुमारं वा यो वा स्यात्तत्र पूजितः ।

जीवग्राहं प्रगृह्णाति तस्य लोका यथा मम ॥

Ibid., 69.

125 Beal: *Life of Hiuen Tsang*, IV, p. 147.

126 Mookerjee's *Indian Shipping*, pp. 113-14; *Ar. Śās.*, Bk. II, 28.

One is the *Nītivākyāmṛta* of Somadeva, and the other is *Laghvarhannītisāra* of Hemacandra. While the former follows Kauṭalya almost *verbatim*, the latter is an abridged version in Sanskrit of a large Prākṛt work the *Bṛhadarhannītisāstra*, now lost to us. Confining ourselves to an examination of these treatises from the point of view of the ethics of war, we find the whole thing is a copy of the Brahmanical codes which we have been examining. An almost futile attempt has been made to find out differences between the *Nītivākyāmṛta* and the *Arthaśāstra*.¹²⁷ In conformity with the Brahmanical treatises Hemacandra prescribes that the king shall not go to war before employing all the three diplomatic means, *sāma*, *dāna* and *bheda*,¹²⁸ for, it is said, battle involves loss of many lives. But once a war is started, it must be conducted on righteous lines, so that there may be little loss of man-power. Cruel, poisoned, or treacherous weapons should not be used. Hemacandra prescribes further that the following should be immune from slaughter in war: ascetics, Brahmans, those who do not wear weapons of war, the afflicted, eunuchs, the naked, those who are asleep, those suffering from illness, refugees, those holding blades of grass in their mouths, guests, and persons engaged in sacrifices.¹²⁹ Such slaughter was equal to murder and did not, therefore, belong to righteous warfare.¹³⁰

127 See Dr. Winternitz's article on *Jainas in Indian Literature*, pp. 161 ff. in the *Indian Culture*, Vol. I, Oct. 1934.

128 II. 1. 19-20.

129 II. 1. 27 : 59. 61 ff.

130 See Hopkins: *Ethics of India* (1924), pp. 101 ff.

SECTION V

DHARMA VIJAYA, ASURA VIJAYA AND LOBHA VIJAYA

There was another division of war—Dharmavijaya, Asura Vijaya and Lobha Vijaya, as contemplated by Kauṭalya and Aśoka, and occasionally mentioned in the epics and the Purāṇas. While the division of the Dharmayuddha and the Kūṭayuddha was in the epic tradition, this kind of division seems to have been an innovation of Kauṭalya, and an improvement on the old systems and methods. Dharmavijaya is an equivalent of Dharmayuddha, while Lobhavijaya and Asuravijaya come under the category of Kūṭayuddha, whose methods we shall presently examine. Before the discovery of the *Arthaśāstra*, and even several years after its discovery, the term *dharmavijaya* occurring in the inscriptions of Aśoka was a puzzle to Aśokan scholars, who unfortunately took for granted that the Emperor was a Buddhist, connected the term with the Buddhist Dharma, and interpreted it just contrary to what it connotes. We are told on no authority that the term which occurs in the XIII Rock Edict means 'conquest by morality'. It is contended that Aśoka substituted 'conquest by morality' for 'conquest by arms'. This is discussed at length in my *The Mauryan Polity*.¹³¹ Suffice it to say here that if we accept that Aśoka became a monk and gave up arms, then according to the Hindu and even the Buddhist conception he relinquished the throne and could not have been an emperor. And with complete disarmament, with States of people professing

131 See also my paper *Dharmavijaya* in *K. B. Pathak Commemoration Volume*, pp. 280-286 (1934).

different faiths and creeds, the vast empire could not be maintained even for a short period.

In interpreting this term, the whole Edict must be taken into account. In the latter part we read according to Hultzsch's translation: "And they (foresters) are told of the power to (punish them) which Devānāmpriya (possesses) in spite of (his) repentance, in order that they may be ashamed (of their crimes) and may not be killed'.¹³² What is this power to punish and kill them except by the employment of weapons of war? What is that repentance except that he waged in Kalinga an unrighteous war involving the slaughter of innocents and that he took a vow from that day to resort to only righteous methods of war? Dharmavijaya is a term of much political significance and Aśoka born and bred in the Kauṭaliyan school of politics, (there is a story that Kauṭalya continued to be the minister of Aśoka's father also), must have followed his political injunctions. It is wrong to take all his Edicts as religious Edicts. They are all political in character and deserve to be re-edited and interpreted from the political standpoint of Kauṭalya to do justice to a very great emperor of India, who had equal regard for all orthodox and heretic sects of his time.¹³³

Though scholars bestowed no independent thought on the term *dharmavijaya* in Aśoka's inscriptions, and followed the translation 'conquest by morality', Mr. F. J. Monahan doubted whether the interpretation was correct and remarked that *dūtas* did not go to different countries to preach Buddhism but to carry the

132 *Corpus*, p. 69.

133 pp. 254 ff.

message of Dharma. What this meant he could not explain, though the explanation lies buried in the *Arthaśāstra*.¹³⁴ According to Kauṭalya, Dharmavijaya meant that a conquering king was satisfied with the acknowledgement of his overlordship by the inferior and defeated powers as also by others. The motive was to avoid war as far as possible, and to promote peaceful and diplomatic relations with neighbours and foreigners.¹³⁵ This was the mission on which Aśoka sent, not missionaries, but political envoys. In the Lobhavijaya the aim of the conqueror was to covet the territory and the treasure of the enemy. In the Asuravijaya, the enemy is captured and deprived of his kingdom, treasure, sons, and wives. Or he was slain and his country was reduced to ashes.¹³⁶ Dharmavijaya means a righteous method of warfare where diplomacy and conciliation were pressed into service to avoid actual fighting as far as possible. It was an attempt to maintain pacific relations. The dominating personality of the conqueror evoked regard from alien states amounting to an acknowledgment of his superiority or equality. It is a war of defence, though defence presupposes aggression.

We shall conclude our remarks on Dharmayuddha with the following quotation from Griffith:¹³⁷

‘ Let the soldier good in battle, never guilefully
conceal

134 *Early History of Bengal*, p. 219.

135 In his *Rajadharma* (Adyar, 1941) Prof. K. V. Rangaswami Aiyangar has accepted this interpretation, pp. 140-43.

136 Bk. II, 1; *Mauryan Polity*, pp. 128-29.

137 *Specimens of Indian Poetry*, p. 9. Cp. Śānti, 100-27-29, *Āpast.* II. 5. 10.11.

(Wherewithal to smite the unwary) in his staff the
treacherous steel:

Let him scorn to bark his javelin: let the valiant
never anoint

With full poison pierce his arrows, never put fire
upon the point,

In his car or on his war-horse, should he chance
his foe to meet,

Let him smite not, if he find him lighted down upon
his feet:

Let him spare one standing suppliant, with his
closed hands raised on high,

Spare him if he sink exhausted, spare him if for
life he crave,

Spare him crying out for mercy, ' take me for I am
thine slave '

Still remembering his duty, never let the soldier
smite

One unarmed, defenceless, mourning for one fallen
in the fight:

Never strike the sadly wounded: never let the brave
attack

One by sudden terror smitten, turning in base fight
his back.'

The Kūṭayuddha: The unrighteous war in which principles were sacrificed at the altar of expediency went by the name of kūṭayuddha. We meet with the term kūṭa in the *Atharva-Veda*,¹³⁸ translated differently as horn, trap, hammer, etc. The hymn says: ' Here are spread the fetters of death, which stepping into thou are not released, let this kūṭa slay of yonder army by

thousands'. According to the *Brahmāṇḍa Purāṇa*, *kūṭayuddha* was also known as *Citrayuddha* in which *māyā* was put into practice. It is said that a certain commander of Bhaṇḍa resorted to this and created a *Sarpanī* from whose limbs thousands of poisonous snakes came out in torrents and bewildered the *śaktis* on the other side. (IV.2). Whatever the word *kūṭa* may mean, its occurrence may be tolerable proof of its use in killing the hostile army by thousands. Neither horn nor trap will kill an army in thousands. So we venture to interpret the word in the *Kauṭaliyan* sense. In this, resort was had to crafty methods, intrigue, charms, and spells against the enemy, besides deadly weapons. The *Atharva Veda* is full of these. Mention is made of amulets (*maṇi*) leading to the overthrow of the rival and to his own success.¹³⁹ One or two hymns may be cited as typical.

‘O Indra, confound the army of our enemies: with the blast of fire, of wind, make them disappear, scattering.’ (5)

‘Let Indra confound the army: let the Maruts slay with force: let Agni take away its eyes: let it go back conquered.’ (6)

‘Yonder army of our adversaries, O Maruts, that comes contending against us with force, pierce ye it with baffling darkness, that one of them may not know another.’¹⁴⁰

The *kūṭayuddha* was the negation of the laws of war. It permitted the use of deadly and poisoned

139 Bk. III. 3.

140 Bk. III. 2.6.

weapons which would slay thousands of men,¹⁴¹ to the entire satisfaction of birds and beasts of prey.¹⁴² From a hymn¹⁴³ of the *Atharva Veda* we may conclude that poisoned arrows were largely used, and the conqueror was usually afraid of them.

One aspect of this was *tūṣṇīm yuddha*, or silent warfare.¹⁴⁴ It was to strike the enemy secretly, as contrasted with *prakāśa yuddha* or open warfare. The principles underlying this method of warfare were in vogue from the time of the *R̥g Veda*. We meet in the *Atharva Veda* a number of battle-charms with the use of plants like *aśvattha*,¹⁴⁵ to overcome an enemy. Similarly there are rites of sorcery against hostile warriors,¹⁴⁶ and the use of incantations.¹⁴⁷ Kauṭalya gives elaborate details of this war, drawing largely, as we have to infer, from the *Atharva Veda*. This has led some scholars to the conclusion that this irreligious war has had the approval of Kauṭalya. Writing a treatise on War Polity, Kauṭalya had to refer to every aspect of it. So he also wrote on the nature and principles of the *kūṭayuddha*. It is wrong to regard him as Machiavellian in his recommendations. If he countenanced the *kūṭayuddha*, he had no business to rule that incendiarism, as an instrument of war, was an irreligious and inhuman

141 A. V. Bk. I, 20, 21; Bk. VIII, 8. 4-5.

142 Bk. XI, 9 and 10.

143 Bk. IV, 6.

144 Bk. VII, 6.

145 Bk. IV, 19.

146 Bk. III, 6.

147 Bk. X, 5.

method of destruction.¹⁴⁸ In his view, if the enemy practised kūṭayuddha, the defender must also resort to it. That is, to advert to a previous remark, opponents should be paid in their own coin. Hence warriors were taught every mode of warfare. They should be equal to the occasion lest they should be overpowered by cunning or intrigue. To that extent, for defence purposes, the kūṭayuddha is permissible, and the defender resorted to it only if he found the opponent resorting to it. Otherwise it is forbidden.

It has been realised that the use of poison, fire, and similar means which are features of the kūṭayuddha were regarded neither just nor fair in war. For they would result in a vast amount of destruction of men, property, cattle, and of other non-combatants. Thus laying the villages and corn-fields of the enemy to waste, poisoning of tanks and wells, using weapons with poisoned tips, setting fire to the camp, striking the enemy concealed, decoying him into an unfavourable position and striking him there, attacking him when fatigued or in sleep or engaged in hunting, are the various methods of attacking the enemy. Other methods which were resorted to in kūṭayuddha were to stir up rebellion among the enemy's subjects by bribery and through secret agents, to murder him, to make surprise attacks on him at night. In short, the baser

148 Bk. XIII, 4. It may be noted in passing that there are a number of hymns addressed to Agni in the Atharva Veda evidently to conquer the hostile army with fire. (Bk. II. 19; XI. 10. 18-19). But it was condemned as irreligious down the ages (see for instance *Pudukottai State Inscriptions*, 744).

methods of diplomacy, like *māyā* and *indrajalā*, underlay the *kūṭayuddha*.¹⁴⁹

Though Śukra would recommend its use to subdue the enemy who resorted to questionable methods and who therefore waged an unjust war,¹⁵⁰ he definitely says later on that in realising his ideal in that manner, the conqueror places disgrace in front and honour at the back.¹⁵¹ In other words, such a king incurs disgrace in this world and sinks into hell. According to the *Rāmāyaṇa*, the Rākṣasa indulged in *kūṭayuddha* and it was not commendable to honourable men.¹⁵² The *Agni Purāṇa* allows weaker powers to resort to wily and underhand methods,¹⁵³ when they found they had no other alternative than to engage in war.

Thus, though some of the Nīti treatises seem to permit this unrighteous warfare, yet the didactic epics and law codes do not support it at all. As a method of war it is condemned as unjust and unfair.

Intimately connected with this subject are two further methods of warfare explained in the *Kauṭalīya*, the *asura* and the *lobhavijaya*, to which we have already referred. In distinguishing a threefold warfare and classifying the *adharma* war into two kinds—*asura* and *lobhavijaya*—Kauṭalya draws a distinction between the two. But it may be noted that this was a peculiar division of Kauṭalya's. For the *asura* form of war is

149 *Ar. Śās.*, Bk. XII, 2; *Kāmandaka* 19.54-66.

150 IV, 7.1.350 and 725.

151 *Ibid.*, 11. 732-33.

152 *Yuddha*, 50. 15.

153 Ch. 240. 16.

mentioned in the *Rāmāyaṇa*.¹⁵⁴ A feature of this was the employment of the diplomatic instrument *māyā*. Guile is chiefly used to overcome the enemy. We know that Indrajit produced a *māyā Sītā* before Rāma's army and killed her so that the army might become dejected and lose all enthusiasm. In the *Śukranīti* again the asurayuddha is among the traditionally accepted kinds of war.¹⁵⁵ We have seen according to the precepts of fair fighting the kingdom of the enemy should not be annexed, nor his women treated unchivalrously. Again, no bodily punishment should be inflicted on the person of the king or his commander. But the asura war, which is the most heinous of all the three, approves of all these illegal and forbidden methods in scoring a victory. Even in actual battle there was no straight fight in this form of war; but victory was sought through wily means. On this account Kautālya advises an inferior power to keep such a demon-like conqueror at a distance by offering him land and wealth. Otherwise he would be wiped out of existence altogether. One example of asura war in the Mauryan period was the war with Kalinga fought by Aśoka.¹⁵⁶ Its salutary effect was to inaugurate a policy of dharmavijaya in his foreign politics.

Traces of this kind of war are found in the Sangam works which also breathe the lofty atmosphere of dharmayuddha. From the *Puranānūru* (15) it is seen that the ruin of the enemy's city was effected by ploughing the roads and streets with donkeys and sow

154 VI. 100.

155 IV. 7. 221.

156 XIII Rock Edict. See Dikshitar's paper in *Woolner Commemoration Volume* (Lahore).

ing seeds of castor, cotton, and other cereals.¹⁵⁷ Another stanza (392) says that even the houses of gods were not spared. In the expedition against Kalingam, though it is said to have been fought on principles of fair fighting, Karuṇākara Tondaimān laid waste the whole of the sea-coast kingdom of Kalinga.¹⁵⁸ A ruthless war was asurayuddha. But it was rarely indulged in, and we may conjecture that it is a relic of the ancient warfare fought by the primitive tribes who had neither a code of chivalry nor a code of ethics.

• *Lobhaviṣaya*: The other kind of war, lobhaviṣaya, was not considered to be as base as the asura form. In it the ravaging of the enemy's territory, or poisoning of his army, was not contemplated. Nor was there to be a wholesale destruction of men and territory. The conqueror was imbued with greed. He was satisfied if he got gain in land or money. A weak power should satisfy such a conqueror with wealth or with the cession of part of his territory. Covetousness is the motive underlying this type of war. It came under the category of an unrighteous war, for covetousness is no virtue but a sin, out of which spring envy, jealousy, or hatred. It would lead indirectly to the wars of aggression, which are not recommended by the Nīti Śāstras. So the *Mahābhārata* says: 'Have your eyes on righteousness, casting off covetousness. You should not abandon your duty (svadharma) from lust or from desire of cattle.'¹⁵⁹ This

157 Cp. Roman custom of sowing salt and pronouncing curses.

158 See *Kalingattupparani*.

159 सत्त्वधर्ममवेक्ष्य हित्वा लोभमसांप्रतम् ।

न च कामान्न च द्रोहात्स्वधर्मं हातुमर्हसि ॥

Śānti., 106. 17; This is also the teaching of *Tiruk-kural*.

lobhavijaya, just like the asuravijaya, is an offensive war, the motive being exploitation. 'Envious of the welfare of other nations, jealous of their success, hating them because of their peace and liberty, their own evil splendour, these (kings and others) open out and declare war to satisfy their covetousness, to slake that idiotic thirst in which covetousness ends—the thirst of conquest for the sake of conquest. Such a war is the worst of sins: and the men, who begin it or carry it on, are, though all the world proclaim their glory, the vilest and meanest of sinners.'¹⁶⁰ These words would equally describe the Hindu view.

The phrase 'Laws of War' implies that if these rules were broken or not observed properly, the State had a right to punish the transgressor. One punishment was social ostracism. He became an outcaste and was debarred from enjoying the social privileges which he as a Kṣatriya had enjoyed so far.¹⁶¹ Again, it is said that the warrior who in order to save his life retreated from the field of battle leaving his comrades behind, should be done to death with sticks or stones. Or he might be rolled in a mat of dry grass and burnt to death. In a word, it is laid down that such warriors as threw to the winds the regulations of conduct and discipline laid down for them should be slain like wild animals. The punishments were no doubt severe, but they helped to keep strict discipline among the rank and file of the Kṣatriya hosts.

¹⁶⁰ Stopford H. Brooke, *A Discourse on War*, p. 675 (The Hibbert Journal, 1915-16).

¹⁶¹ *Mhb.*, Śānti. 96.9-10.

CONCLUSION

The foregoing survey may convince an impartial student of history that the ancient Hindus had evolved precepts on fair fighting which formed a chivalrous code of military honour. But it must be admitted that these laws of war including the laws of chivalry were so varied and so complicated that they led to ineffective discipline, in some cases owing to excess on the part of leaders and in others to the gradual extinction of the martial qualities by misplaced generosity through forgiving dangerous enemies who sought shelter or refuge in order to study the enemy's weakness and then attack him with redoubled force. Grahavarman's assassination and Rājyaśrī's incarceration may be referred to here as having evoked contemporary horror and condemnation in the seventh century A.D. 'The sad fate of Pṛthivi Rāja Cahamāṇa at the close of the Hindu period,' says a recent writer, 'tells an eloquent tale of the military tragedy of ancient India.'¹⁶²

CHAPTER III

WEAPONS OF WAR AS GATHERED FROM LITERATURE

SECTION I

BOWS AND ARROWS

Dhanur Veda classifies the weapons of offence and defence into four—the *mukta*, the *amukta*, the *muktā-mukta* and the *yantramukta*. The *Nītiprakāśikā*, on the other hand, divides them into three broad classes, the *mukta* (thrown), the *amukta* (not thrown), and the *mantramukta* (discharged by mantras).¹ The bows (*dhanus*) and arrows (*iṣu*) are the chief weapons of the *mukta* group.

It would not be out of place here to examine their characteristics and uses as recorded in the earliest literature known to the Hindus. Both in the *Saṁhitās* and in the *Brāhmaṇas* we read of bows and arrows besides the inevitable vajra of Indra, the Lord of Heaven. The very fact that our military science was named Dhanur Veda proves sufficiently clearly that the bow and arrow were the principal weapons of war in those times. It was known by different terms as *śārṅga*, *kodaṇḍa*, and *kārmuka*. Whether these were synonyms of the same thing or were different, it is difficult to say. In the age of the *R̥g Veda Saṁhitā*, it would appear from the terms *iṣukṛt* and *iṣukāra* that there existed a regular profession of arrow-

1 *Nīti*, II, 11-13; Cp. *Agni Purāṇa*, 249.2.

making.² The Ṛg Vedic smith was not only a steel-worker but also an arrow-maker. While the head of the arrow was prepared by him, the rest was finished by a guild of arrow-makers.³

It is interesting to read in the Aitareya Brāhmaṇa, a composition earlier than 600 B.C., how the gods fashioned an arrow.⁴ In the Upāsads of the Somayajña the gods made an arrow. Of it the point was Agni, the socket Soma, the shaft Viṣṇu, and the feathers Varuṇa. Using butter as the bow, the arrow was thrown. This enabled the piercing of citadels. Again, at the Upāsads recourse was had to four teats for milk: and this was because of the socket, the shaft, and the feathers. Further, the fore-offerings and the after-offerings were divine armour.⁵ These fore-offerings and after-offerings were to prevent rending by an arrow. Thus here we are introduced to the essential elements of an arrow, and its effective use. Again in the Rājasūya portion of the Pañcika V mention is made of weapons like the bow and the arrow, and the defensive cuirass for the body.⁶

To turn our attention to the Kauṣītaki Brāhmaṇa in the Abhyudita sacrifice, the dakṣiṇā (fee) is a bow with three arrows. It is said that a bow is unfailing in giving a safe and sound journey.⁷ Thus the principal weapons that figure in this class of literature are bows and arrows.

The *Nītiprakāśikā* mentions twelve kinds of arms under the *mukta* category. Among these the bow figures

2 R.V.I., 184, 3; Vāja. Sam. 30. 7.

3 See *IHQ.*, V, p. 434 and n. on p. 435.

4 I. 25. IV, 8 (A. B. Keith).

5 I. 26. IV, 9.

6 VII. 19 (34.1).

7 *K. Brāh.* IV. 2.

prominently and it still exists. It is four cubits in height, bent at three places and with a tusk-like opening.⁸ We are told that the bow-string should be taken by the right hand and bent by the left. The thumb should be placed on the arrow. Two strings are invariably used for a bow. The left-hand portion of the bowman must possess a defensive leather armour, and a quiver is to be hung from his neck. Fourteen different movements in the practice and use of this weapon are given.⁹ The word *astra* in the *Śukranīti* is interpreted by Dr. Oppert as a bow.¹⁰ But to interpret it as an arrow seems to be more correct.¹¹ The *Agnipurāṇa* furnishes details of a bow. The rod of a bow may be made of any of the three materials, steel, horn, or wood.¹² The strings may be made of the fibre of bamboo or other trees. The rod of a wooden bow was four cubits or six feet in length, and that of middling or inferior class measured a cubit less. Thick substances were wrapped round the grip so as to make the shaft of the bow steady and also easy. The bow made of steel must have a small grip, and its middle portion is said to resemble the eyebrow of a lady. It is usually made in parts, or together and inlaid with gold. The horns used in the making of bows are those of a buffalo, rhinoceros, or rohisā and of the mythical animal śarabha, while the wood is of sandal,

8 *Nīti*, II. 17 and IV. 8-9.

9 *Ibid.*, IV. 18-20.

10 *Śukra*, IV. 6-10.

11 *Ibid.* The term *astra* means a missile, anything which is discharged. *Āgneya astra* means a fiery arm as distinguished from a firearm. For a firearm means any weapon projected by means of fire.

12 *Agni Purāṇa*, 245. 5.6 and 7-10.

sāla, cane, kukubha or dhabala. But the bamboo bow is the best of all. Arjuna's Gāṇḍīva was perhaps of this material. While the bowstrings are of muñjā grass, arka plant, hemp, cavedu, bamboo and sinew, the rod of the bow may be of gold, silver or copper. Kautalya distinguishes four kinds of bows—Kārmuka made of palmyra, Kodanḍa of bamboo, Druna of darnwood and Dhanus of bone or horn. It may be noted in passing that the bow of Śrī Kṛṣṇa was of horn.

According to *Śiravyāsa Dhanur Veda*, the measurement of a bow is given as 4×24 inches.¹³ In the *Kodanḍa Maṇḍana* the various characteristics of a bow are given. Eighteen kinds of bows are mentioned according as the strings are heavy or light.¹⁴ The various weights and measurements of the different kinds of bows are also given in it. The weight of a yogin's^{14a} cāpa or bow is two palas, of one practising or learning the science, is 300 palas, and the weight of that which is made of reeds 400 palas, that which could be hit with the bowstring is also 400 palas, that used in battle 700 palas, and that used from a distance 950 or 1,000 palas. Very heavy bows could not be used effectively. A description of the divine bow used only by celestials is then given.

It is said that the archer who uses bows as described in the Śāstras attains great glory.¹⁵ For example, Bhīṣma used a bow six cubits long against Śankha, a diocesan. That Kālidāsa is well acquainted with the

13 *Śāranga*, 1748.

14 Fibres of murva, arka, śana, gavethu, veṇu and snāyu are mentioned by Kautalya.

14a One endowed with magical powers.

15 *Kodanḍa*, Ch. 5.

use of the bow is seen from the *Raghuvamśa*. He refers to the twang of the bowstring of both Rāma and Lakṣmaṇa heard by Tāṭakā.¹⁶ Also in the *Śākuntalam* there are several references in which Duśyanta is credited with high skill in archery.¹⁷ Thus the chief weapon of war in primitive days was the bow which was drawn to the ear, and not as in Greece, to the breast. Its use is not altogether extinct even now. The Khasās or the hill tribes of Assam have a simple bow while the Western Nagas have a bullet bow. Incidentally we may speak of the crow-bow whose origin is attributed to Mongolia and which is now in popular use with the tribes of Indo-China.¹⁸ In Wilson's words, 'the Hindus cultivated archery most assiduously and were very Parthians in the use of the bow on horse-back.' One feature of this weapon was that it could be handled by all the four classes of warriors.

The arrow comes next. Its length is three cubits. Two movements are peculiar to it. How an arrow came to be designated *śara* is seen in the *Śatapatha Brāhmaṇa*,¹⁹ where it is stated that when Indra threw his thunderbolt against Vṛtra it became separated into four parts. The first three were the wooden sword (*sphya*), post (*yūpa*) and the chariot. The last piece which was broken off by the blow fell on the ground as a *śara* (arrow). Because it was broken it came to be so designated. There are also other references to it. What the arrow-head is to the arrow so is the Agni to the

16 *Raghu*. 11.15; 12.103.

17 *Śākun*. II. 4 and 6.

18 See *Man in India*, (Aug. 1932).

19 1. 2. 4.: See also VI. 5.2.10.

sacrifice.²⁰ The Kauṣītaki Brāhmaṇa mentions it as a part of the sacrificial fee.²¹

The making of arrows is described in the *Agni Purāṇa* as follows.²² They are made either of iron or bamboo, the latter well grained, of good vein, and of a golden colour.²³ It has feathers at the tail end and must be oiled so as to be easy of use. It also possesses gold-tipped points. Three kinds of arrows are distinguished, the best, the middling, and the inferior. Each must be discharged by holding its feathered end with the thumb. The shaft of the superior type of arrows measures 12 muṣṭis (perhaps one muṣṭi—one pala), of the middling one 11, and of the last 10 muṣṭis. Manu refers to these weapons also. Kālidāsa speaks of sharp, deep and strong shafts,²⁴ while Kauṭalya mentions five kinds, veṇu, śara, śalāka, daṇḍasāra, and nārāca.²⁵ Some

20 II. 3.3.

21 IV. 2.

22 *Agni Purāṇa*, 245.12.

23 According to the *Harihara Caturanga* they were made of tālatṛṇam, druma (sāla or vamsa), danta, śṛṅga of śarabha (Bk. v). In the *Viṣṇudharmottara* they are said to be made of metal, śṛṅga and dāru like vamsa or bamboo. This shows that in the passage of time, the old things were found useless and given up. The use of metal is significant and indicates the latest development in the art of war. It is worth noting that the *Lakṣanaprakāśa* quotes from a work *Vaidyakantra* where a cāpa of saptāṅga (seven limbs) is considered auspicious, and from yet another work *Traiyaṃbika Dhanurveda* which refers to ten kinds of cāpa (pp. 275-77). Most of them agree with the description given in the *Viracintāmaṇi Dhanurveda* (*Ibid.*, p. 279).

24 *Śākun.* 1.10.

25 Nārāca was a bāṇa made of metal. The term bāṇa in the time of Bhoja meant an arrow. Here the shaft was light but stiff with a sharp point. Vasiṣṭha speaks of nārāca made of iron, five-

are provided with iron points for cutting, bone points for rending, and wooden ones for piercing. A man who could pierce through metal plates half the thickness of a finger, or twenty-four layers of leather, was considered proficient.²⁶

How to use both the bow and arrow is thus elaborately described.²⁷ Taking the arrow with the right and the bow with the left hand, the archer should string it. The feathered end of the arrow must be made to rest on it, leaving a small space between the string and the rod. The bow must be drawn to the ear, and to the full extent in a straight line. Care must be taken in discharging an arrow. The position he should take when aiming at a particular object must be a triangular one. But this is not the only position known to the science of archery. We have others also. The first is the Samapada or a standing position where the leg, the calf, the palm, and the thumb of the hands are closely knit against each other. The Vaiśākha consists in standing on tip-toe with thighs in a fixed position and a space between the two feet on the ground. The Maṇḍala is done by standing in a circular or semi-circular posture, leaving more space between the two feet than in the former. The Ālīḍha is a position where the right thigh and knee are to be kept steady while the left is drawn back. The Pratyālīḍha is the reverse of this position. That of Sthānam occupied on the whole the measurement equal to the fingers. In the Nīścala the left knee was held

sided and five-feathered. It is said that very few succeeded in shooting with a nārāca (*I.H.Q.*, vii, p. 707).

26 *Ibid.*, p. 708.

27 *Agni Purāṇa*, 249. 9-19.

straight and the right knee bent. The Vikaṭa was where the right leg was placed straight and the Sampuṭa was where both the legs were raised and the knees were bent, while in the Svastika both legs were stretched straight, the feet protruding outside.²⁸

Arrian²⁹ speaks of one mode of equipping the Indian soldiers for war. The foot-soldiers invariably carried bows. Resting these on the ground and pressing them with the left foot, the soldier discharged the arrow. The shaft in use was about three yards in length. 'There is nothing which can resist an Indian archer's shot, neither shield nor breast-plate nor any stronger defence if such there be. On the left hand they carry bucklers of undressed hide. Some wear javelins in the place of bows, but all of them wear a sword with a broad blade about three cubits long. This they use only in close fight.'

It is interesting to examine side by side with these the weapons used in ancient Greece and Rome.³⁰ The missile used was the javelin or dart. But with later developments in archery on account of the shortness of its range it soon fell into disuse. There seem to have been different varieties of the bow, such as long bows and

28 The recent finds at Mohenjodaro and Harappa reveal a number of weapons of war in use in the Chalcolithic period. These are bows and arrows, axes, spears, daggers, maces, slings, and catapults. The sword is however conspicuous by its absence. Confining our attention for the present to the bow and arrow, and judging from a specimen of an arrow head made of copper and from the absence of stone arrow heads, we have to infer that these weapons were sparingly used.

29 *Indika* of Arrian (McCrindle).

30 The *Tutorial History of Greece*, pp. 336-37.

cross bows. To the Greek, Apollo was the bow-god. In Greece, bows were made of wool, horn, horse-hair, and even hide. But the disadvantages of such arrows and bows were experienced during winter, when they became relaxed and consequently became inefficient. In India in almost every war recorded either in the Purāṇic or Epic literature, bows and arrows loom very large. It would be interesting to recall the story of Prince Peerless from the Jātaka.³¹ 'One day his king wanted to test his skill and asked him to bring down a cluster of mango fruits with an arrow from a tree beyond. On this he removed the white cloths which he had on and put on a red waist cloth and fastened his girdle. He equipped himself with a sword on his left side, a mail of gold, a bow with a red string and turban on his head and with arrow set to the bow, he asked the king whether he is to get the cluster with an upward shot or he is to make the arrow drop on it. The king who was not acquainted with the latter method suggested it. The arrow was discharged and down came both the cluster and the arrow, the latter making a terrible noise.'

The prince caught the arrow in one hand and the cluster in the other so that they might not fall down on the ground. The king commended his skill and duly honoured him. From this it would appear that this great and useful military science was flourishing and received encouragement from the State.

SECTION II

FIRE ARMS

In this connexion it would be interesting to

31 The *Jātakas*, Vol. II. 181 (Cowell).

examine the true nature of the āgneya-astras. Kautālyā describes agni-bāṇa,³² and mentions three recipes—agni-dhāraṇa, kṣepyo-agni-yoga, and viśvāsaghāti. The agni-dhāraṇa is said to consist of small balls made of the dung of the ass, camel, goat and sheep, mixed with the wood of saralā (pinus longifolia), devadāru (deodar), the leaf of pūtiṛṇa (lemon grass), guggulu, śrīveṣṭaka (turpentine) and lac. The kṣepyo-agni-yoga was a fire arm consisting of 'the dung of the horse, ass, camel or cattle, mixed with ~~pr~~yāta'cūrṇa (buchanania latifolia), avalguja (vernonia authelmintica), lamp black and bees' wax'. Viśvāsaghāti was composed of 'the powder of all the metals as red as fire or the mixture of the powder of kumbhi, lead, zinc, mixed with the charcoal powder of the flowers of pari-bhadraka, palāśa and hair, and with oil wax and turpentine'. From the nature of the ingredients of the different compositions it would appear that they were highly inflammable and could not be easily extinguished. About the third and the last recipe, a recent writer remarks: 'The Viśvāsaghāti-agni-yoga was virtually a bomb which burst and the fragments of metals were scattered in all directions. The agni-bāṇa was the fore-runner of a gun-shot..... Sometimes the metallic head of the arrow was made red-hot by charcoal fire and the hot arrow will prove more dangerous than the cool. The aboriginal tribes of Kols and Santals of Bengal and Bihar shoot bear with redhot arrows, which they say, kill the beasts while cool arrows prove ineffective. It is to be noted that among the

32 XIII. 4. In the Lalitopākhyāṇa of the Brahmāṇḍa Purāṇa fire arms are mentioned as being used in the war with Bhaṇḍa.

war materials collected in the battlefield of Kurukṣetra charcoal was one'.³³

Intimately connected with this topic is the question whether the ancient Hindus knew the use of gunpowder and guns. Sir A. M. Elliot tells us that the Arabs learnt the manufacture of gunpowder from India, and that before their Indian connexion they had used arrows of naphtha. It is also argued that though Persia possessed saltpetre in abundance, the original home of gunpowder was India. It is said that the Turkish word *top* and the Persian *tupang* or *tufang* are derived from the Sanskrit *dhūpa*. The *dhūpa* of the Agni Purāṇa means a rocket, perhaps a corruption of the Kāuṭaliyan term *nāla dīpikā*.³⁴

In the light of the above remarks we shall trace the evolution of fire-arms in ancient India. Commencing our enquiry from the *R̥g Veda Samhitā*, there is evidence to show that agni (fire) was praised for vanquishing an enemy. The *Atharva Veda* shows the employment of fire-arms with lead shots.³⁵ The Aitareya Brāhmaṇa³⁶ describes an arrow with fire at its tip. The term *sūrmī* in the *R̥g Veda*,³⁷ considered in the light of its use as the death penalty for criminal offenders as in the *Mānava-dharma-śāstra*,³⁸ must have been of the nature of a hollow tube and has nothing to do with guns.

In the *Mahābhārata* and the *Rāmāyaṇa*, the employ-

33 Jogesh Chandra Ray: *Fire Arms in Ancient India*, I.I.Q., viii, p. 268.

34 *Ibid.*, pp. 586-88.

35 I. 16.4.

36 I. 4.8.

37 I. 5.

38 XI. 103.

ment of āgneyāstras is frequently mentioned, and this deserves careful examination in the light of other important terms like *ayah*, *kanapa* and *tulā-guḍa*. Though the commentator Nīlakaṇṭha would easily explain them away as guns, *kanapa* is perhaps the same as *kuṇapa* in the *Matsya Purāṇa*.³⁹ In the *Daśakumāra-cāritra* the term is *kanapa*, and the reading of the *Matsya Purāṇa* perhaps may be faulty. The other term, *tulā-guḍa* which is said to produce a noise like thunder is difficult to explain.⁴⁰ Guḍa is perhaps the same as gula, meaning a ball projected by a lever (tula). In the *Matsya Purāṇa* ayoguḍa stands for a bullet of iron.⁴¹

In the Epics again aurva figures as a fire-arm.⁴² Aurvāgni means subterranean fire, the invention of which was probably attributed to the sage Aurva. It cannot be taken seriously as a fire-arm and may fitly find a place among the mythical weapons of offence. We have spoken already of nārāca, and it is worthy of note that the term appears side by side with nālīka in the Epics.⁴³ Evidently they refer to two distinct types of metallic arrows. The nālīkas were missiles often barbed. In later days the term meant guns.

The *Śukranītisāra* uses nālīka in this sense and speaks of two kinds of nālīkas, the large and the small. The latter was used by horsemen and footmen. The bigger variety which had no wooden stock was carried on wheels. The agnicūrṇa or gunpowder was composed

39 Ch. 149. v. 8.

40 *Vana Parva*, 42.5.

41 Ch. 153. v. 133.

42 *Mhb.*, *Vana Parva*, Ch. 82.

43 *Rāmā.*, VI. 45.23; *Mhb.*, *Bhīṣma Parva*, 106.33.

of 4 to 6 parts of salt-petre, one part of sulphur, and one part of charcoal of arka, sruhi and other trees burnt in a pit and reduced to powder. Here is certain evidence of the ancient rockets giving place to actual guns in war-fare. From the description of the composition of gunpowder, a later date is ascribed to the composition of the *Śukranīli* which cannot stand close scrutiny. Be this as it may, the conclusion is unmistakable that guns were largely in use even not far after the beginning of the Christian era. In the *Vāsisṭha Dhanurveda*, a later work, nārāca, nālika, śataghnī figure as fire-arms.⁴⁴

A word may be said about the śataghna or śataghnī. Śukra and Vasiṣṭha use this word in the sense of cannon. But it is doubtful whether in earlier times, for instance in the epoch of the Epics, it meant a cannon. Possibly it did not. In its literal sense it meant a machine able to kill a hundred men. It seems to have been a heavy column of stone or timber fixed with iron spikes on the ramparts of fortresses. Kautalya refers to it in this sense only. The ancient fortresses of Ayodhyā and Lankā had these machines provided on their ramparts.⁴⁵ There is the authority of the *Hari-vamśa* to indicate that there were smaller types of these machines carried in the hand. But these types do not find mention in the later military literature; the term used there unmistakably refers to cannon. It can therefore be safely concluded that these weapons, guns, and cannon were popular in India at the best before the

44 See also *Vīracintāmaṇi Dhanurveda* quoted in the *Lakṣaṇa-prakāśā*, p. 282.

45 See P. C. Dharma: *The Rāmāyaṇa, Polity*, Madras (1941), pp. 72-73.

advent of the Portuguese towards the close of the 15th century.

SECTION III

OTHER WEAPONS

The Bhindipāla and the nine following are minor weapons of this class. Probably this was a heavy club which had a broad and bent tail end, measuring one cubit in length.⁴⁶ It was to be used with the left foot of the warrior placed in front. The various uses of this weapon were cutting, hitting, striking and breaking.⁴⁷ It was like a kunta but with a big blade.⁴⁸ It was used by the Asuras in their fight with Kārtavīrya Arjuna.

The next, śakti, is identified with the spear.⁴⁹ It was two cubits long and had an open and a broad mouth in shape like the leaf of a tree. Its ends resembled the udder of a cow and were four hastas in length. It required the use of both the hands. Six kinds of position regarding this are given. The blade was of metal and the handle of wood. This as well as the Bhindipāla are mentioned also by Kautalya. Kālidāsa puts its use for cutting open the body.⁵⁰

The Drughana, again in shape like the mudgara, is

46 *Niti.*, IV. 30-31.

47 *Agni Purāṇa*, 252. v. 15.

48 Ganapati Sastri, Vol. I. p. 252.

49 *Niti.*, IV. 32-35; Ganapati Sastri, Vol. I. p. 251; *Raghu.*, 12.77.

50 The Anśanasa Dhanurveda gives more details. The śakti is said to be of three kinds—the best, middling and inferior. Their handle was again of four kinds—bamboo, wood, ivory and iron (See *Lakṣaṇa Prakāśa*, pp. 313 ff.).

translated as a latchet by Dr. Oppert⁵¹ but probably was a wooden mace or a staff headed with a heavy spiked ball of iron, as is seen from the further details given in the stanza. Its length was from 4 feet to 2 inches, and it was put to four kinds of use. It is also mentioned by Kauṭalya.

The Tomara is another weapon of war frequently mentioned in all kinds of warfare.⁵² It was of two kinds, an iron club (*sarvāgasam*) and a javelin (*daṇḍa*).⁵³ According to Vaiśampāyana it was a club three cubits long and capable of three different movements. According to the *Agni Purāṇa* it was to be with the help of an arrow of straight feathers, and was powerful in dealing blows on the eyes and hands of an enemy. But Kauṭalya's commentator says that it is a rod with an arrow-like edge. It was of three kinds, the inferior, the middling, and the best, according to their respective measurements, 4, 4½ or 5 hastas in length.

The Nālīka⁵⁴ is a hand gun or musket rightly piercing the mark. It was straight in form and hollow inside. It discharged darts if ignited. As has been already said, Śukrācārya speaks of two kinds of nālīkas, one big and the other small. The small one, with a little hole at the end, measured sixty angulams (*i.e.*, distance between the thumb and the little finger) dotted with several spots at the muzzle end. Through the touch hole or at its breech which contained wood, fire was conveyed to the charge. It

51 *Niti*, IV. 36-37.

52 *Niti*, IV. 38-39; *Agni Purāṇa*, 252. v. 10; Ganapati Sastri, p. 252 (Pt. 1).

53 Auśanasa Dhanurveda quoted in *Lakṣaṇa Prakāśa*, pp. 311 ff.

54 *Ibid.*, 40-41; *Śukra*, IV, 7, 194-200; *Kāman*, V, 52; *Naiṣadha*, II. 28.

was generally used by foot-soldiers. But the big gun had no wood at the breech and was so heavy that it had to be conveyed in carts. The balls were made of iron, lead or other material. Kāmandaka uses the word *nālika* in the sense of a firing gun as a signal for the unwary king. Again in the *Naiṣadha*, a work of the mediaeval period, there is a beautiful stanza where the two brows of Damayanti are compared to the two bows of the god of love and goddess of love, and her two nostrils to the two guns capable of throwing balls. Thus there is clear evidence of the existence and use of firing guns in India in very early times.

The *Lagaḍa* was probably a cudgel or heavy staff with metallic feet.⁵⁵ It was two cubits long. It could be used in four different ways. It was sometimes put to the same uses as a *Bhindipāla*. It was cased in a sheath of leather and held either with both hands or only with the right hand.

The next weapon is the *Pāśa*,⁵⁶ which is a noose killing the enemy at one stroke, of two or three ropes used as a weapon attributed to the god *Varuṇa*. It was triangular in shape and embellished with balls of lead. It was associated with three kinds of movements. Four different ways of throwing a noose are mentioned. In the *Agni Purāṇa* are described eleven ways of turning it to one's own advantage by dexterity of hand: some of them are turning back, advancing forward, using it lightly and also extraordinarily quickly and rending asunder. In this *Purāṇa* a noose is ten cubits long made of cotton, thread, *muñja* grass, leather, or sinews of animals. It

⁵⁵ *Niti*, IV. 42-43.

⁵⁶ *Ibid.*, 45-46; *Agni Purāṇa*, ch. 252. vv. 5-8.

may be thirty cubits long and folded up in three rings. It was held on the left side and then taken to the right and whirled over the head. It could be easily thrown from a horse in trot. It is said that by the performance of the Varuṇa-Prakāśas, the sons of Prajāpati were released from the noose of Varuṇa.⁵⁷

The Cakra,⁵⁸ the next weapon in the category, is a circular disc with a small opening in the middle. It was of three kinds of eight, six and four spokes.⁵⁹ It was used in five or six ways. It resembled the quoit of the Sikhs to-day. The various uses of a disc were felling, whirling, rending, breaking, severing, and cutting. It is one of the instruments peculiar to Viṣṇu. Kauṭalya speaks of it as a movable machine.

The Dantakaṇṭha⁶⁰ is another weapon of war, perhaps of the shape of a tooth, made of metal, of strong handle and a straight blade. It had two movements.

The Musuṇḍi⁶¹ is the last weapon in this category and was probably an eight-sided cudgel. It was furnished with a broad and strong handle. Its peculiar movements were whirling and jerking. It apparently comes from the root-meaning to cleave or break into pieces, and is perhaps akin to the Musala.

All these weapons are found used in one battle or another both in the *Mahābhārata* and the *Rāmāyaṇa*.

57 *Kau. Brāh.* V. 3.

58 *Nīti.* IV. 47-48; *Agni Purāṇa*, 252. vv. 5-7.

59 See Auśanasa Dhanurveda quoted in the *Lakṣaṇa Prakāśa*, pp. 309 ff.

60 *Ibid.*, IV. 49-50.

61 *Ibid.*, IV. 51-52. In the *Brahmāṇḍa Purāṇa* mention is made of Bhusuṇḍi.

SECTION IV

THE AMUKTA WEAPONS

We may now study the Amukta group of weapons, which are of twenty kinds according to Vaiśampāyana. Here also we shall try to follow the list.

The first was the Vajra or the thunderbolt. In the Tirthayātra portion of the *Mahābhārata*⁶² a mythological origin is given to this weapon. It was made out of the backbone of the Ṛṣi Dadhīci which was freely given by him to Inara. Originally perhaps it had six sides and made a terrible noise when hurled. There seem to have been different varieties in the use of this weapon. In the *Śatapatha Brāhmaṇa*⁶³ the thunderbolt that Indra hurled against Vṛtra is described as having 1,000 spikes and 100 edges. The sacrificial post in the *Kauṣītaki Brāhmaṇa*⁶⁴ is referred to as a thunderbolt. Its breadth and length were fifty and a hundred miles respectively. It had sharp points and a good handle. Four movements are attributed to it. Sometimes the ends of this weapon were whirled round in such a way as to hold a blindipāla in the middle. The Paṭṭiśa,⁶⁵ another weapon of war, is sometimes put to the uses of a Vajra.

The Iṣu is translated as a hand sword by Dr. Oppert, but may be an arrow or a reed-like weapon. Halāyudha identifies it with Kāśāstra.⁶⁶ It had a bent front, and the whole measured two cubits in length. Four move

62 Vana Parva. 99.

63 I. 2.4.

64 X. 1.

65 Agni Purāṇa, 252. v. 16.

66 Raghu., 12.23; Nīti. V. 7-8.

ments were associated with it. Perhaps Atikāya, the Rākṣasa, used it in his engagement with Lakṣmaṇa.

The Paraśu⁶⁷ is the battle-axe attributed to Paraśu-rāma, of great fame. Its blade was made of steel and it had a wooden handle. Another variety of it was a mighty staff holding the head of an axe at its end. Three kinds are distinguished.⁶⁸ It was used for cutting and rending. The Semitic origin assigned to this weapon of war cannot be taken as correct, for there is nothing in the R̥g Vedic religion that has not an Aryan source.⁶⁹ The six ways of manipulating it to one's own advantage are raising aloft in a formidable manner, making it descend slowly or quickly, raising it rapidly, making it fixed, and making as if one had nothing in one's hand. The commentator on the Kautaliya says it is a scimitar and semi-circular and twenty-four inches long.

The Gośiras⁷⁰ is probably a spear resembling the shape of a cow-horn two feet in length. The lower portion is made of wood, and the upper of iron. Its action is five-fold. Tradition represents that Indra presented this weapon to Manu, the first king of the world.

The Asidhenu⁷¹ is a small dagger one cubit in length. It has three edges and is used in close fighting. Its handle is slender and small. Perhaps it is the same as the Asiyaṣṭi of Kautaliya.

67 *Ibid.*, V. 9-10.

68 Auśanasa Dhanurveda quoted in *Lakṣaṇa Prakāśa*, pp. 310-11.

69 *Cambridge History of India*, Vol. I, p. 88; *Agni Purāṇa*, 252. v. 13.

70 *Niti*, V. 11-14.

71 *Ibid.*, V, 15-17.

The Lavitra⁷² is a sickle, an instrument used in mowing and reaping. It has a crooked shape, sharp at the end. It has a comparatively big handle. Both hands are used in hurling it.

The Astra⁷³ is associated with the boomerang, and has a long head at the top and a knot at the foot, with the middle bent. Whirling, drawing, and rending are its three movements. In the Madras Museum three boomerangs—two of ivory and one of wood—are exhibited. Dr. Oppert had drawn attention to these, and said that they were not of Australian origin but native to the soil and especially to South India, where the boomerang is known as vaḷaitaḍi or bent stick.

The Kunta⁷⁴ is a lance and also a kind of barbed dart, six to ten cubits long. It can be manipulated in six ways. It is of iron and has six edges. Śukra speaks of ten hastas as its measurement, having the end of a ploughshare capable of opposing another dart. It is mentioned in the *R̥g Veda*. According to Kauṭalya's commentator who seems to follow the *Aśvanasa Dhanurveda*,⁷⁵ it is a wooden rod 5 to 7 hastas in length. It is of three kinds, the best, the middling, and the inferior, measuring 7, 6 and 5 hastas respectively. The Rāja-vijaya, however, mentions a tool of 11 hastas and 9 hastas.⁷⁶

The Sthūṇa⁷⁷ was a pillar-like instrument and has

72 *Ibid.*, 18-19.

73 *Ibid.*, 20-21.

74 *Niti.*, 22-23; *Śukra*, IV, 7, 215; Ganapati Sastri, 252 (Vol. I).

75 Quoted in *Lakṣaṇa Prakāśa*, pp. 316 ff.

76 Quoted in *Lakṣaṇa Prakāśa*, p. 318.

77 *Niti.*, V. 24.

the height of a man with several knots at the top. Dr. Oppert speaks of it as an anvil.

The *Prāsa*⁷⁸ measured four hastas and had a sharp face. *Vaiśampāyana* speaks of it as made of bamboo with a metallic head. It was handled in four ways. Its length was seven cubits. It figures also in the *R̥g Veda*. *Kauṭalya*'s commentator speaks of it as 24 inches long with two handles.

The *Pināka*⁷⁹ is the *Śūla* of *Śiva*, usually translated as a trident. It had three prongs made of iron and the front is of brass. It measured four cubits. *Śukrācārya* speaks of it as *triśīras* measuring three hastas. Its uses are striking, thrusting, rending, cutting to pieces, breaking, and severing.

The *Gadā*⁸⁰ is a heavy rod of iron with one hundred spikes at the top. Three kinds are distinguished according to the *Aśvamedha Dhanurveda*.⁸¹ One of four cubits was able to destroy elephants and rocks. It could be handled in twenty different ways. By means of gunpowder it could be used as a projectile weapon of war. Its principal use was to strike the enemy either from a raised place or from both sides and strike terror into the enemy especially of the *Gomutra* array. Various ways of handling it with skill were bending, stooping low, springing forward, retreating, ready to fly upon, and so doing as to generate fear. *Kauṭalya* includes it in his list of movable machines.

The *Mudgara*⁸² was a staff in the shape of a hammer

78 *Śukra*, 4, 7, 214; *Nīti*, V, 25-26.

79 *Nīti*, 27-29; *Śukra*, 4, 7, 215; *Agni Purāṇa*, 252, v. 9.

80 *Nīti*, V, 29-34; *Śukra*, 4, 7, 212; *Agni Purāṇa*, 252, v. 12.

81 Quoted in *Lakṣaṇa Prakāśa*, p. 315.

82 *Nīti*, V, 35-36; *Raghu*, 12-73; *Kauṭalya* (Tr.), 101.

three cubits in length, and with a strong circular handle. The *Amarakośa* mentions it with the Durghaṇa mentioned above. It was used to break heavy stones and rocks. Śankarācārya compares *moha* or magical delusion to a Mudagara in a short poem entitled *Mohamudgara*. It is sometimes used in the sense of a club to break down clods of earth. This is again a movable machine according to Kauṭalya.

The Sira⁸³ is translated as a ploughshare by Dr. Oppert. It was bucket-like instrument curved on both sides and with a wide opening made of iron. It was as long as a man's height.

The Musala⁸⁴ is a weapon of Balarāma. It was a pestle-like club, both ends well knit together. It was a pointed rod made of khadira. It belongs to the category of Śūla or trident. In the Rāma-Rāvaṇa yuddha, the Rākṣasas used Musalas of iron embellished with gold.

The Paṭṭiśa⁸⁵ is a kind of spear with a keen edge made of copper or iron. Dr. Oppert translates it as a battle-axe. This does not seem to be correct, because the same weapon is mentioned in the previous list. There was a hand-guard in the handle. It had two keen blades of iron and measured the height of a man. Mention is also made of it both in the *Śukranīti* and the *Agni Purāṇa*. Kauṭalya speaks of it as a razor-like weapon.

The Maustika,⁸⁶ or fist-sword, may be a sharp knife perhaps used in boxing encounters. It had a strong

83 *Ibid.*, V. 37.

84 *Ibid.*, 38.

85 *Ibid.*, 39; *Śukra*, 4, 7, 212; *Agni Purāṇa*, 252. 16.

86 *Nīti*, V. 40-44; 40-44; *Śukra*, 4, 7, 213.

handle and was capable of making all sorts of movements. It had a sharp end in the shape of a navel and was radiant as the moon.

The Parigha⁸⁷ was a wooden beam used for locking or shutting a gate, and was a battering ram. According to Vaiṣampāyana it was made of wood and circular in shape. It was so heavy that a whole army of soldiers would be required to handle it.

The Mayūkhi,⁸⁸ or a staff with a hilt, had the height of a man and was furnished with small bells. A shield was also provided for it.

The Śataghnī,⁸⁹ literally means that which had the power of killing a hundred at a time. It looked like a Gadā and is said to be four cubits in length. It had a strong handle, and also possessed a number of iron spikes in it. It is generally identified with the modern cannon and hence was a projectile weapon of war. Mallinātha quotes from Keśava in his commentary on the word occurring in the verse 95 of Chapter 12 of the *Raghu-vaṃśa*:

śataghnī tu catustāla lohakaṇṭaka samecitā yaṣṭih!
iti Keśavaḥ.

It was generally placed on the walls of a fort and is included among the movable machines by Kauṭalya. These and other weapons are frequently mentioned as employed actually in the wars of the *Rāmāyaṇa* and the *Mahābhārata*. Thus both the *mukta* and *amukta* weapons are 32 in number, all made according to tradition from the bones of the sage Dadhīci as explained in the *Mahā-*

87 *Raghu.*, 16.84; *Nīti.*, V. 45.

88 *Nīti.*, 46-47.

89 *Ibid.*, 48-49; *Raghu.*, 12. 95; *Ar. Śās.*, (Trn.) 101.

bhārata. They were made out of the bones of his body except the backbone, of which was formed the Vajra. But in the Amukta category an important weapon of war, the Asi or the sword,⁹⁰ is not included. Its omission is due, not to the lack of knowledge, for Vaiśampāyana has practically devoted a whole chapter to its description, but to the fact that it has been referred to elaborately enough in a previous chapter. Vaiśampāyana thought it unnecessary to repeat it here. Or it may be that it was such a useful celestial weapon that it had to be treated separately and not along with the ordinary weapons that are given in the list. The Asi⁹¹ is also known in Sanskrit literature by different other names—Nistrimśa, Visamana, Khaḍga, Tikṣṇadhāra, Durāsada, Śrigarbha, Vijaya, and Dharmamūla, meaning respectively cruel, fearful, powerful, fiery, unassailable, affording wealth, giving victory, and the source of maintaining dharma. And these are generally the characteristics of a sword. It was commonly worn on the left side and was associated with thirty-two different movements. It measured fifty thumbs in length and four inches in width.

It is of particular interest to read the legendary origin of the sword. Nakula, the best swordsman of his day, asked Bhīṣma on his death-bed how it came into being. The following is the substance of what Bhīṣma said in reply.⁹² Brahmā created all creatures and also

90 *Nīti*, III.

91 For the practical uses of the weapon see *Lakṣaṇa Prakāśa*, p. 293.

92 Śānti and Āpad Parva. 166. Compare this account with that given in the *Viṣṇudharmottara*.

the Vedas. But the Asuras never paid heed to these and often had recourse to evil ways. The people could no more bear their misdeeds and prayed to Brahmā for help. Then he made a great sacrifice. Out came from the sacrificial fire an ugly creature at which the whole world trembled. It soon changed into a sword lustrous and sharp-edged. It was given to Rudra who single-handed cut and pierced a mighty host of the Asuras. After this Rudra gave this weapon to Viṣṇu, who in his turn presented it to Marīci, from whom it successively came into the hands of Vasava, the Lokapālas, Manu, his son Ikṣvāku, and Purūruvas. Then it changed several hands such as Nahuṣa, Yayāti, Bharata, Raghu, Bharadvāja, Droṇa, Kṛpa, and from this last to the Pāṇḍavas. It had for its star the Kṛttikā Nakṣatra. Its presiding deity was Agni, the god of fire. It belonged to the Rohiṇī community and its first preceptor was Rudra himself. Hence all soldiers were to worship this weapon of weapons.

The Purāṇic literature knows of different varieties of swords.⁹³ Those which were manufactured in Khaṭi and Khaṭṭara were famous for their lustre, those of Kaiśika for power in felling, of Sūrpāraka for durability, and of Vanga and Anga for sharpness. The best swords were those which measured fifty fingers in length. The rest were inferior. The inferior ones must not be used. The test of a good sword was that it must not only be sufficiently long but when used in any way must produce a ring sound. The sword that had an end like the edge of a lotus was

93 *Agni Purāṇa*, 245. 22-27. The *Lakṣaṇa Prakāśa* gives extracts on this subject from two works, *Lohārṇava* and *Khaḍgakośa*. pp. 295-97.

an auspicious one. The sword was generally worn on the left side hanging from the belt, the scabbard being held in the left hand. The use of it consisted in rending, cutting, lopping, and striking the enemy. The *Śukranīti* speaks of it as four hastas in measurement and of keen edges. A sword was valuable for the acquisition of wealth, kingdom, fame and the destruction of the enemy. A sword was to be made of iron and was of the colour of the cuckoo's neck. Its blade should be like the petal of a lotus. It should be deep inside, bulging in the middle, with keen edges and with no blot of any kind; natural symbols were also said to be visible on it from which its value could be determined. So whenever kings used it they should get it previously examined as to its qualities.⁹⁴

There is a different kind of measurement given in the texts. The best sword measured fifty inches, a middling one forty inches, and the least good thirty-six inches.⁹⁵ Those which were cracked, basket-like, and of broken edges, perforated, devoid of handle, and crooked were not fit for practical use. Those in which the Linga, Garuḍa, swan, and other auspicious and artistic images could be seen were good. They were usually made of Pandrara iron found in the Jāngala country, black iron in the Anūpa, white iron in the Śataharana, gold-coloured iron in the Kalinga, oily iron in the Kambhoja, blue-coloured iron in Gujarat, grey-coloured in the Maharāṣṭra, and reddish white in the Karnāṭaka.⁹⁶ More

94 *Agni Purāṇa*, 251. 7.8; and 252 Ref.; *Śukra*, 4-7-214.

95 The sword of fifty inches is named, according to *Devīpurāṇa*, *Trīśikha* (see *Lakṣaṇa Prakāśa*, p. 299). See also *Varāhasamhita* for more details; *Ibid.*, pp. 299 ff.; *Loharatnākara*, *ibid.*, pp. 305 ff.

96 *Śārngadhara*, 4621, 26, 38, 44, 52-60 and 4689. *Śiva T. R.* 5—9th sarga.

details are seen in the same *taranga*. According to Kauṭalya again, Nistrimśa, Madantagara, and Asiyaṣṭi are swords and their handles were made of horn, tusk, or wood. It is interesting to examine in this light the several swords of Arjuna, such as the long sword with the bee mark, a big sword finished with good blade and a sheath of tiger skin, one with a golden hilt cased in cow-skin, a gold sword manufactured by the Niṣādhas and cased in goat-skin, an iron sword with gold points, all without any stain or knot in them.⁹⁷

SECTION V

MINOR AND MYSTICAL WEAPONS OF WARFARE

Any detailed examination of the other species of weapons would unduly swell this volume; we therefore confine ourselves to a categorical enumeration of the list as given in the Nītiprakāśikā. There are two classes of the Mukṭāmukta division—Sopasambhāra (throwing out) and Upasambhāra (withdrawing). There are forty-three varieties of Sopasambhāra: Daṇḍacakra (a disc),⁹⁸ Dharmacakra (a disc for maintenance of righteousness), Kālacakra (a disc of death), Aindrachakra (a disc attributed to Indra), Śūlavata (a trident attributed to Śiva), Brahmaśīrṣa (a missile assigned to Brahmā), Modakī (a bewitching missile), Śikharī (a pointed missile to cut off the head), Dharmapāśa (a noose for maintenance of righteousness), Varuṇapāśa (a noose attributed to Varuṇa), Pinākāstra (a bow attributed to Śiva), Vāyavya (a missile of Vāyu), Śuṣka (a missile to

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97 *Mhb.*, Virāt Parva, 42. 21.

98 II. 22-27.

dry up), Ārdra (a missile for drenching), Śikharāstra (a missile emitting flame), Krauñcāstra (a heron-like missile), Hayaśīraṣa (a missile in the form of a horse), Vidyāstra (a missile of incantation), Avidyāstra (a missile of illusory powers), Gāndharvāstra (a missile attributed to Viṣṇu), Nandanāstra, Varṣaṇam (a shower producing missile), Śoṣaṇam (a missile attributed to God of Love), Prasvāpana (a missile causing deep sleep), Praśamana (a soothing missile), Santāpana (a death-giving missile), Vilāpana (a noisy missile), Madana (a trust-giving missile), Mānavāstra (a missile peculiar to Manu), Nāmana (a missile of air-force), Tāmasa (a missile engendering darkness), Samvarta (a missile throwing a screen or a veil), Mausala (a club-shaped missile), Satya (a celestial missile), Saura (a missile attributed to the Sun God), Māyāstra (an illusory missile), Tvāṣṭra (a missile peculiar to Viśvakarma), Somāstra (a missile peculiar to the Moon), Samhāra (a missile causing impediments), Mānasa (a missile attributed to Viṣṇu), Nāgāstra (a serpent-shaped missile), Gārudāstra (an eagle-shaped missile), and Śaiveṣika (a missile of stone).

The second class of this Mukṭāmukta division, *i.e.* Upasambhāra, contains a list of fifty-three different weapons.⁹⁹ These are Satyavān (perhaps a missile that would act according to one's wish), Satyakīrti (a missile probably famous in the Satyaloka), Rabhasa (a missile of violent quickness), Drṣṭa (a missile shaped like the shaft of a carriage), Pratihāratara (a missile for preventing an attack), Avāṅgmukha (a missile with its face turned downwards), Parāṅgmukha (one with the

shape of a leaf or a tree), *Dr̥thanābha* (a navel-shaped missile), *Alakṣya* (a missile discharged with no aim), *Lakṣya* (one discharged with some aim), *Āvila* (one in the shape of an ewe), *Sunābhaka* (one with a strong focus at the centre), *Daśākṣa* (one with ten cavities or openings), *Śatavaktra* (one with a hundred mouths), *Daśaśīrṣa* (one with ten-headed missile), *Śatodara* (one with hundred cavities), *Dharmanābha* (a navel-shaped missile for maintaining righteousness), *Mahānābha* (one having a big central point), *Dundhunābha* (one with the central point like a drum), *Nābhaka* (one like the nave of a wheel), *Jyotiṣa* (a lustrous missile), *Vimalakula* (a pure missile), *Nairāsyā* (one engendering discouragement at the outset), *Kṛṣṇa* (a small missile), *Yogandhara* (one of superhuman powers), *Sanidra* (one attributed to Indra), *Daitya* (one peculiar to the Asuras), *Pramathana* (a slaughtering missile), *Sārcirmālī* (one in the shape of a garland), *Dhṛtirmālī* (that could be seized or laid hold of), *Vṛttimān* (one that would move and turn), *Rucira* (a restorative missile), *Pitṛya* (one in shape like the constellation Magha), *Saumanasa* (a floral missile), *Vidhūta* (an unsteady missile), *Makara* (one in the shape of the crocodile), *Karavīra* (a sword or scimitar), *Dhanarati* (one giving wealth), *Dhānya* (one affording grains), *Kāmarūpaka* (one that takes a shape at will), *Jṛmbaka* (a wide-mouthed missile), *Āvaraṇa* (one serving as a protection), *Moha* (one producing spell), *Kāmaruci* (one acting to one's wish), *Vāruṇa* (one attributed to Varuṇa), *Sarvadamana* (the all-subduing one), *Sandhāna* (a well-aimed missile), *Sarvanābhaka* (one like a serpent), *Kankālāstra* (one with heron's feathers), *Mausalāstra* (a pestle-like missile), *Kāpālāstra* (a skull-like missile), *Kankaṇa* (one resembling the

bracelet) and Paisācāstra (a devilish missile).¹⁰⁰

This is a literal translation of the names which occur in the texts. To the list here given, Vaiśampāyana adds six more weapons which could be used only with the application of mantras—the Viṣṇucakra, the Vajra, (the thunderbolt), the Brahmāstra (attributed to Brahmā), the Kālapāśaka (the noose of Yama), the Nārāyaṇāstra (attributed to Nārāyaṇa), and the Pāsupatāstra (attributed to Śiva).

Viśvāmitra,¹⁰¹ to whom the *Dhanurveda* is attributed seems to have had a working knowledge of most of these weapons. Besides those mentioned above, Viśvāmitra adds the Tejahprabha (lustrous), the Śīśira (frigid), the Kinkini (Kankana) (with tinkling sound), and the Dāruṇa of Bhaga (a terror-striking missile). In the second class of Upasambhāra again Viśvāmitra adds Śucirbāhu, Mahābāhu, Niškuli, and Viruci, having respectively the characteristics of a good hand, a long hand, a niṣka, an ornament and fire.

Among the thirty-two Mukta and Anukta weapons, Kauṭalya, as we have seen, mentions the Śakti, the Prāsa, Kunta, Bhindipāla, Tomara, bows and arrows, Paraśu, Paṭṭiśa, Cakra, Mudgara, Gadā, and the Śataghnī. The other nineteen are not mentioned. But he gives different kinds of weapons, the Hāṭaka, the Śūla, the Varāha-karṇa (another form of Prāsa), the Kaṇaya (a metallic rod), the Karpaṇa (an arrow that can go one hundred hastas in length), the Trāsika (a rod with three edges), the Kuṭhāra (a small one with one edge), the Khanitra (a spade), the Kuddāla and the Kāṇḍacchedana, the

100 II. 28-35.

101 *Rāmāyaṇa*, Bālakāṇḍa, Cḥh. 27 and 28.

Yantrapāṣāṇa (stones thrown by machines), the Goṣpa-
napāṣāṇa (stones thrown by rod), the Muṣṭipāṣāṇa, the
Rocanī, and stones, besides 27 kinds of movable and
immovable machines. Apparently the other weapons
mentioned in the *Nītiprakāśikā* had gone out of use by
the time of Kauṭalya.¹⁰²

The *Arthaśāstra* again mentions twenty-seven machines of which only five—the Musala, the Mudgara, the Cakra, the Gadā and the Śataghñī—are referred to by Vaiśampāyana. Another important fact that we gather is that in the time of Kauṭalya the forts must have become indispensable sources of defence, military architecture being highly developed. The ten immovable machines mentioned by Kauṭalya are not found in the early literature, from which it can be safely inferred that fortifications had not developed to any great extent in the days of the *Nītiprakāśikā*. The immovable machines, according to the author of the *Arthaśāstra*,¹⁰³ are Sarvatobhadra (a small cart capable of hurling stones on all sides), Jāmadagnya (a large machine to shoot arrows), Bahumukha (one with archers), Viśvāsaghāti (a cross beam at the gateway so placed as to make it fall when the enemy enters), Sanghāti (a long pole to set fire to the fort), Yānaka (a rod mounted on a wheel to be hurled against enemies), Parjanya (a water-machine to put out fire), Bāhu (two pillars placed opposite each other to be pulled down when enemies enter) and Ardhabāhu (a pillar measuring half of the above). Again, the following movable machines are given: Pāñcālīka (a wooden beam with sharp points

102 *Ar. Śās.*, Bk. II. 18.

103 *Ibid.*

outside the fort wall), Devadaṇḍa (a pole with nails), Sūkārika (a leather wall to protect the roads, towns, etc. against stones thrown by enemies), Yaṣṭi (a pointed rod of khadira), Hastivāraka (a rod with two or three points to prevent elephants from resting on), Tālavṛnta (a form like that of disc), Spr̥ktalā (a rod with sharp points on its surface), Kuddāla (a spade), Sphāṭima (a leather bag with a rod), Audaghātima (a machine to pull down towers, etc.) and Triśūla (a trident). [There is ample testimony to indicate that some of the machines were employed in actual operations: the missile Tastra was used by the son of king Śatrujit against Pātālaketu and other demon warriors.¹⁰⁴ In the battle between Śālva Rāja and Bhīṣma both Varuṇa and Aindra weapons were used.¹⁰⁵ Again, Arjuna used the Vāyavya weapon in his encounter with the Nāgas, and it had the power of staying thunder, lightning, winds, and several other forces.¹⁰⁶ He also used Salila and Śaila weapons to ward off illusions of fire and wind from the Nivāta-kavacas.¹⁰⁷ Droṇa used the Aindra, Vāyavya and Āgneya astras during the Great War,¹⁰⁸ while his son employed Nārāyaṇāstra in another encounter.¹⁰⁹ The other weapons used by Arjuna are the Nāga missile, the Saupada, the Indrajāla, Sthūlakarṇa, the Pāśupata, and the Bhārgava.¹¹⁰ Arjuna also used the Māhendra mentioned as a

104 *Mārkaṇḍeya*, 20.

105 *Mhb.*, Ādi Parva, 109. 49-51.

106 *Ibid.*, 129.

107 *Mhb.*, Vana Parva, 173. 10.

108 *Ibid.*, Virāt Parva, 60. 75.

109 *Ibid.*, Droṇa Parva, 200. 17.

110 See Sorensen's *Index to the Mahābhārata* under article Arjuna.

fire-arm in the great epic literature. Rāma employed, besides the above, the Brahmadatta bāṇa.¹¹¹ In the engagement between Lakṣmaṇa and Atikāya, the latter used the Rudra and the Nārāyaṇa missiles, while the former used the Brahmaśiras.¹¹² In the battle between Angada and the Rākṣasa Kampaṇa, several missiles, like the Kṣuras, Kṣurapras, Vatsadantas, Śilimukhas, Karṇicalyas, and Vipāṭhas are found used.¹¹³

Lastly, the Jṛmbha missile is mentioned in the *Uttararāmacarita*.]

That the use of fortresses became more and more important is well seen from the latest publication of King Bhoja's *Samarāṅgaṇasūtradhara*, which is assigned to the 11th century A.D. In it are mentioned the door-keeper machine and the warrior machine at the gateway to prevent undesirables from entering the city. Then there were other kinds of machines with arrows and other weapons for the protection of the fort, besides the water machines for letting down waters in torrents and the one for catching elephants, etc. Thus most of the machines refer to siege warfare in general, a sign that the use of fortresses was very common.¹¹⁴ Here again the sword, the Prāsa, the Kunta the Śataghnī, are mentioned.

From these it appears that the skilled work of military engineering, such as road-making, bridge-making, and digging of tanks and of sappers and miners, was well known.

111 *Yuddha*, 111. 4.

112 *Ibid.*, 71. 67-110.

113 *Ibid.*, 76. 6.

114 *Samarāṅg*, Ch. 31, 106-16.

SECTION VI

ON ARMOUR

The questions relating to the kind of armour and the mode of wearing them are indeed of lively interest and have a direct bearing on the arms used. We know that even in the days of the *R̥g Veda* the equipment of the soldier consisted of a coat of mail, helmet, and even an arm-guard.

Varuṇa is mentioned as wearing a golden mail with lustrous appearance and as surrounded by spies.¹¹⁵ That several varieties of armour were made of horns, skins, and also of iron, is evident from the *Arthaśāstra* literature. The animals whose horns were used for this were tortoise, rhinoceros, bison, elephant, and cow.

The four important varieties of armour, all of iron according to the commentator of the *Arthaśāstra*, were in the first place a coat of mail to cover the body from head to foot including the two hands, secondly a coat of mail of two separate plates covering the head, hump, and arms respectively, and thirdly, a kind of armour to be worn as a loin-cloth.¹¹⁶

Other varieties of armour used merely for protecting the body were Śīrastrāṇa or protection for the head, Kaṇṭhatrāṇa or protection for the neck, Kimpasa or a covering for the trunk, Kañcuka or a jacket up to the knee joints, Vāravāṇa or a jacket extending to the heels, Paṭṭa or an upper garment, and Nāgodārka or gloves to protect the fingers. Some of the instruments used to shield one's hands in engagements were Pethi (a kind of

115 *R̥g Veda*, I. 25. 13.

116 *Ar. Śās.*, 18 (Commentary by Ganapati Sastri).

shield made of creepers of Kāṣṭha), Carma, otherwise known as Resumendaka (made of leather, perhaps to protect the palm of the hand), Tālamūla (another variety of shield made of wood perhaps palmyra). Bhamanika (a shield made of reed), Kavāṭa (a shield resembling the panel of a door), Kiṭikā (a protection made of hide or bamboo), Apratihata (perhaps a shield used in elephant fights) and Valāhakānta (one of leather or bamboo like the Apratihata but surrounded by iron fringes). The war elephants as well as the war horses were also provided with trappings and ornaments to shield them from the attacks of the enemy's forces. The Śukranīti speaks of a coat of mail for the body and the trunk as well as for fingers. For the former, big leaves resembling wheat leaves, made of iron, were considered best, whilst for the latter iron nails with sharp edges were considered the best.¹¹⁷ The skins, horns, and iron were used abundantly for the making of shields and the coats of mail are obvious from the sculptures which we shall presently examine. But the author of Śukranīti mentions the use of leather armour for war animals.¹¹⁸

It is needless to mention that there is a close link between the *Arthaśāstra* literature and the epic and Purāṇic literature. The Asuras or the demon warriors put on armour made of the skins of elephants, antelopes, and barks of some trees.¹¹⁹ It is said that during the fight between the king of Virāṭa and Suśarma, all the soldiers put on their respective coats of mail. Virāṭa's

117 *Ibid.*

118 *Śukra*, 4.7.216-17.

119 *Harivam.*, 31.

brother Śatānika wore one of adamant, and ornamented with gold, whilst his eldest son Sankarṣaṇa had a coat of well-tempered iron.¹²⁰ Again, the great warrior Kṛpa's mail armour was of tiger-skin.¹²¹ In the *Mahābhārata* war all had finger-guards and put on coats of mail made of the skin of the antelopes and other animals.¹²² And Duryodhana had a helmet formidable to look at.¹²³ The soldiers had also bracelets made of bull's hide.¹²⁴ Jayadratha, the great king and warrior, wore a plate of gold which was broken into two pieces by Saubhadra's sword.¹²⁵ When Bharata came to meet his brother Rāma, Guha, the lord of the Niṣādhas took him for an enemy and asked his followers to be ready for an attack with their mail accoutrements.¹²⁶

It would be interesting to close this section with the remark that with the progress in metal culture and advance in civilisation, effective methods of warfare were also developed. If we go far back in time, we find that the primitive tribes used weapons made of stone and wood. We find in the *Rāmāyaṇa* that the monkey tribes, which may be considered one of the most ancient tribes in India, used trees and stones as implements. The civilized man just emanating from the life of a hunter used bows and arrows in war. Stones and stone weapons were in use

120 Virāt Parva, ch. 33.

121 *Ibid.*, 54.

122 Bhīṣma Parva, chh. 16 & 18.

123 *Ibid.*, 64.

124 *Ibid.*, 88.

125 Droṇa Parva, 43.17.

126 Rām., Ayodhyā., ch. 84.

continuously for thousands of years. Then bronze came into large use, and gave an advantage in warfare to those tribes who first obtained it.¹²⁷ In the Chalcolithic period as borne out by the numerous archaeological finds in the Indus valley, and much earlier, as is seen in the epoch of the R̥g Vedic Samhitā, copper and bronze had come to supersede stone. Though there was a large use of bronze for purposes of making implements of war, stone weapons continued to be used.

The epoch which followed the Chalcolithic period of India's history witnessed the introduction of iron. This was the age of the Yajur Veda Samhitā where distinct mention is made of the use of iron and iron weapons. Arms and armour of this metal now came to be used, for, it was found more valuable than even bronze. Gold and silver were also pressed into service because of their plastic and ornamental possibilities. These metals came to be used for the making of arrows as well as for shields and other effective weapons of defence. This state practically continued to flourish until the days of Alexander the Great and of Megasthenes, the ambassador of Seleukos. For the Fragments of Megasthenes testify to their use in abundance. Javelins made of simple bamboo and sago palm quite innocent of iron, remnants of which still linger among some of the hill tribes of India, have been superseded by iron swords and the throwing spear. These swords were straight in shape and two-handed, in use at the time of Alexander's invasion of India and popular later in the Malay Archipelago, as evident from bas-reliefs of Angkor-Wat in Cambodia.

127 H. G. Wells: *The Outline of History*, pp. 109-110.

SECTION VII

ARMS AND ARMOUR FROM SCULPTURE

It is nearly forty years since Baden Powell wrote as follows in the *Journal of Indian Art and Industry* (Vol. I): "It will be interesting when, some day, some antiquarian¹²⁸ is found to reproduce the various ancient forms of weapons as they appear in the sculpture." Here an humble endeavour is made to study as far as possible some of the interesting sculptures relating to ancient arms and armour which disclose many peculiarities of ancient warfare and thus possess great historical value. Much spade work has been done here by Edgerton and Birdwood whose observations are found in their respective publications, *The Illustrated Arms of India* and *The Industrial Arts of India*, and also by Bhattacharya and Gopinatha Rao, so far as iconography is concerned. There are also other interesting works like those of Burgess, Cunningham, Havell, Fergusson, and Smith, most of which have also been laid under contribution.

128 There is not yet a single publication in India on the lines of Prof. A. Parmentier's 'Album Historique' published in four volumes under the direction of Ernest Louisse of the French Academy (Librairie Armand Colin, Paris, 1905). It is a study of the habits and customs, of arts and sciences, of weapons and ornaments, and of institutions of the age from the 4th to the 19th century A.D. For our purpose the attention of the reader can be directed to soldiers and cavalry warriors of Gaul clad in military attire on p. 2 of Volume I and of their different arms (Vol. I, pp. 4-5), and of the French military costume and implements (Vol. I, pp. 91 and 99), of the mediaeval customs of the 7th to the 15th century A.D. (p. 137) and of the battle scenes of England (pp. 172-73; see also pp. 196 ff.). This helps the comparative student of military history of the East to study Western institutions.

A careful study of the various types of sculptures found in various parts of India from far-off Gāndhāra to South Indian temples, is invaluable to a student of Hindu military History. Cunningham¹²⁹ says: 'With regard to the use of sculptures, although no certain examples now remain of an earlier date than the time of Aśoka, yet I can point to the statement of Curtis that an image of Hercules was carried in front of the army of Porus as he advanced against Alexander. This worship of Hercules is also mentioned by Strabo on the authority of Megasthenes as prevailing in the plain country while the people of the hill worshipped Bacchus. But from the post-Aśokan period we find a rich and wonderful development of this great art. It may be that during the comparatively brief interval of peace during Aśoka's reign that the manufacturers of weapon and other war-arms as well as the artisans took to this important work, much of it being absorbed by the State. The devout followers of Buddhism took great interest in getting the various Buddhist shrines ornamented and painted. The result was good and striking reliefs in the place of frescoes. 'These circumstances explain', says E. B. Havell, 'the peculiar characteristics of the Bhārhut, Sānchi and Amarāvati sculptures'.¹³⁰

Among the earliest sculptures known so far are those at Bhārhut.¹³¹ Here in the stūpa are found boats, chariots drawn by horses, carriages drawn by

129 *Coins of Ancient India* (Preface).

130 *Indian Sculpture and Painting*. p. 92.

131 V. A. Smith: *A History of Fine Art in India and Ceylon*, p. 30.

bullocks, many musical instruments, and flags. Here again we notice the old Indian broadsword as described by Megasthenes. 'All wear swords of vast breadth, though scarce exceeding three cubits in length. When they engage in close fight they grasp these with both their hands so that the blow may be the stronger'.

Another interesting feature is a procession of maskers and soldiers. The men are of the Himalayan region, wearing dress and armour apparently made of leather used in that region in the time of Kaniska about 100 A.D. The arrangement of the scales of the armour with the curved ends uppermost, bears resemblance to similar discoveries by Stein in Khotan.¹³² We owe much to Cunningham and Fergusson for a critical study of the sculptures of Sānchi and other places. There is a vivid representation of the operations of a siege in one of the reliefs.¹³³ The equipment of the soldiers is a tight-fitting dress and quilt. All have their swords hung on their left side. Apparently the swords are short, but very broad; bows and arrows are invariably found in the hands of the foot-soldiers. There are eleven topes in Sānchi; and proceeding further we see that every pillar in every tope has some historical incident or other that is full of interest to us. Sieges and triumphal processions may be said to be a regular feature of the whole.

The most striking is the remarkable study of a besieged city in Tope No. 1. Soldiers attacking the enemy down with arrows and huge stones below are found on the gateway and also on the great towers. Here

132 M. Aurel Stein: *Ancient Khotan*, Vol. I, p. 252.

133 Edgerton: *Indian and Oriental Armour*.

we find no swords of any description.¹³⁴ But that they were none the less used by the warriors is obvious from the fact that several of them have long shields. On the left side are seen two men carrying ensigns, a number of elephants with riders, and also one man riding on a horse. We also notice distinctly enough the quiver which is fastened to the right shoulder, and also the fastenings, which are apparently leather straps, are passed over the shoulders, crossed in front, and carried to the back. The dress is a kilt and also a jacket of some kind. According to Cunningham their dress on the whole resembles that of the Scottish Highlanders. Their principal weapon used in this siege-fight seems to be the arrow. 'Their (Mauryan) arrows are little less than three cubits long and fly with such force that neither shield nor breast-plate nor any armour is strong enough to withstand them'. But in the bas-relief some arrows seem to be even four or five feet long. It is also seen that some warriors have darts in the place of arrows.

An idea of the different kinds and shapes of weapons used in the first century A.D. may be obtained by an examination of Plate xxxiii¹³⁵ relating to Sānchī sculptures in general. Here are found swords, shields,¹³⁶ two kinds of axes, trident, javelins, Vajra, dagger, elephant-goat, bells, flags, fly-whisk, two or three kinds of drums, umbrellās, etc. Comparing them with those of Udayagiri (A.D. 401) we may conclude that there are material

134 Cunningham: *The Bhilsa Topes*, ch. XIV.

135 Op. Cit., *The Bhilsa Topes*, (the last plate in the book).

136 In the Rock paintings of the Mahadeo Hills we meet with warriors with sword and shield. (Indian Art and Letters X. pp. 35-41, plates VIII and IX).

differences between the weapons used then and here especially with regard to swords and the Vajra.

From this it can be inferred that there has been a slow but sure evolution in the form and make of weapons with the march of time. In the art of war it was not one of stagnation but real progress; again, in the same Plate we study two kinds of shields, one smaller than the other. The latter are worn by foot soldiers, and the former by horsemen.

At Sānchī, again, there is a representation of the War of Relics.¹³⁷ Here it is remarked that the Lichchavis, the Śākya, the Balis, the Kolyas, the Mallas of Pāva and a Brahman advance against Kusinara to recapture the relics of Buddha from the Mallas of Kusinara. In the middle of the Plate the siege of the town, and to the left the departure of the victors are illustrated.

On a pillar in the Amarāvati tope, decidedly later than those of Sānchī, we notice a straight sword, long spears and long bows with horsemen and elephants. But there are no chariots here. This does not mean that the chariots had fallen into disuse. More or less the same kind of swords, oblong shields, long bows are also noticed in the Hill-Caves of Orissa, evidently before the fifth or sixth century A.D.¹³⁸ In the more ancient sculptures of the temples of Bhuvaneśvara we meet with processions of infantry, cavalry, and elephants. There are heroic warriors elegantly sculptured. A small dagger hangs from the waist belt of every one of them.

137 See Ludwig Bachhofer: *Early Indian Sculpture*, Vol. I, plate 47.

138 Hunter: *Orissa*, I, p. 235.

In another frieze there is a little scene of war horses with heroes on them. Behind these are foot soldiers apparently in marching order equipped with bows and swords. The bow is long and the sword is straight. Further behind them follow the commissariat. Lastly come other soldiers, with straight swords and oblong shields evidently made of hide. On the other side is seen the army council where councillors are engaged in deep deliberation. We also see an order of priests doing the necessary ceremonials to bless them with victory.

Let us now turn to the temple at Kanarak, of which there is an excellent plate (Plate XLIII)¹³⁹ in Havell's book. Outside the southern façade are represented two huge horses apparently guarding the gate, the one intact and the other in ruins. This is a war-horse with a Roman nose and prominent eyes. He is very richly caparisoned with bosses and bands round the face, heavy chain-armour on the neck, tasselled necklaces, jewelled bracelets on all four legs and a tasselled breast-band which keeps the saddle in position. There is also a sheath capable of holding a small dagger and a quiver with tethered arrows. The horse is trampling under his foot two soldiers who wear short and curved swords. They have not the necessary equipment for defence. But there are seen circular shields besides a number of musical instruments, apparently resembling modern ones, such as cymbals, the small drum, the guitar, etc. These seem to belong to the middle ages. It is interesting to read Havell's remarks on this scene: 'Here Indian sculptors have shown that

139 Havell: *Indian Sculpture and Painting*, p. 147.

they can express with as much fire and passion as the greatest European art the pride of victory and the glory of triumphant warfare: for not even the Homeric grandeur of the Elgin marbles surpasses the magnificent movement and modelling of this Indian Achilles and the monumental war-horse in its massive strength and vigour is not unworthy of comparison with Verachio's famous masterpiece at Venice'.

We have in Kanarak, again, a war horse led by a warrior and trampling an Asura, though it is assigned to the 13th century A.D.¹⁴⁰ Others worth mentioning are an elephant lifting an Asura and a gryphon trampling and goring Asuras.¹⁴¹

Further, we have a number of tableaux on the upper verandah of the Queen's monastery.¹⁴² Hunter is of opinion that it may be dated 200 B.C. Here is splendidly represented a battle between a prince and a princess. The princess is defeated and is carried away forcibly. We find only the shield and not the sword in her hand. Apparently the latter was lost in the conflict. The sword of the prince is unsheathed. Again, in the Ganesh cave high up the hill, there is another series of tableaux giving the same story with slight variations. When the prince is running with her on an elephant he is pursued by a number of soldiers. The use of the bow by a number of soldiers is seen in the hunting scene. In these sculptures we have the representation of a woman-warrior wearing a sword and a shield and capable of resisting a trained prince. These cases of women fighting

140 See Coomaraswami: *Viśvakarma*, 1914, Pl. LXXVI.

141 *Ibid.*, LXXVII and LXXIX.

142 Hunter: *Orissa*, I.

in the field are indeed very rare and hence remarkable.

THE AJANTA CAVES

No study of Indian art would be complete without some reference at least to the Ajanta Cave paintings.¹⁴³ The weapons in these are without any exception very primitive ones. In Plates vii and xxvi are seen representations of a curved dagger held point upwards and perhaps in the left hand so as to leave the right hand free. Plate viii probably refers to the return of a party from a hunt. The scimitar is placed on the right shoulder. But there is no scabbard. Then we see a peculiar kind of shield which looks as if it were a segment of a wheel with the spokes left out. It may be the round kind of shield with grotesque forms of tufts or tassels round the fringes thrown over behind the shoulder with straps and buckles. There is also a quiver for holding arrows which is slung on the back of a foot-soldier, marching with a horse-rider. But curiously no bows are seen.

In Plate xix are noticed long lances with diamond-shaped blades and streamers flying from them in the air. In Plates xxi and xxxviii are found spears. In the former, apparently an elephant-catching scene, is a curious kind of spear sharpened at the edge, about eight feet long and furnished with three rings at the top. The blade is almost one foot long. The latter seems to illustrate the scenes from the Viśvatantra Jātaka. Here the soldier wears a sharp thrusting spear with heavy knobs cleanly represented beside the horses. In Plate xxiii is a highly ornamented sword with a strong hilt and also

143 *The Ajanta Frescoes*—India Society.

a cross-bar. There are ornamental knobs along the scabbard. In Plate xxvii is a short dagger worn at the waist used by hill tribes in West India even to-day. A short but stout club is carried on the right shoulder, used as a weapon of war in early days. Besides there is the ordinary simple type of bow with one piece. Plates xxiv and xxxvii are vivid representations of chariots. In the former are seen ladies also seated. It appears to be the one on which the king accompanied the army on its onward march to battle. The decorated paintings leave nothing to be desired. The battle-axes with long handles and about four feet in length each, are seen worn on the right shoulder in Plate xxxvi. The Bodhisattva himself is given a kukri, a survival of the ancient sword with a sharp concave edge used by the Gurkhas of to-day.

Plates xvii and lvii afford deep interest. The *motif* in both seem to be the same and indicate the battle scene of Vijaya's conquest of Ceylon with war-elephants, horses, and archers all carried in curricles. Two of these curricles carry eight or nine mounted horses and two or three war elephants. The Plates are indicative of the picturesque appearance of an army on the march. Almost every variety of weapons can be found here. The curricles are embellished with dragon-heads and the like. The soldiers carry standards flying from the sharp ends of their lances. Umbrellas and cāmaras or fly-whisks and instruments of martial music, which are a unique feature of ancient warfare, are also vividly represented. Here two cakras or discs with sharp edges on the outside and a 'voided cross' in the centre are shown as evidently discharged and warded off by the enemy's lances. Scimitars like the chopper or the bill, both straight and

of the primitive kind, are common. Shields both crescent and oblong are seen, handsomely curved in the longer dimension apparently made of leather. There are two bows of the classic double-curved variety. Both square and round quivers are also noticed.¹⁴⁴

The dress of the soldiers, it appears, was made in two pieces, viz. from the breast to the waist and again from the thigh to the soles. The chief musical instruments were the drum and the kettle-drum. In the pictures the troops are crossing a broad river and from the bank the enemies attack them. Possibly the soldiers attack from the water. Both horses and elephants are provided with excellent ornamental trappings. A bell is seen hanging from the elephant's back. The war-horses have the prominent Roman nose, piercing eyes, and a gallant appearance. The trappings resemble those of the present day. The one peculiarity is that no stirrups are seen in any of the pictures. The usual war accoutrements of the elephant and the elephant goad, like the modern one, are easily traced. Plate lv shows two kinds of helmets: pot-shaped ones, and skull caps, made of leather or iron richly ornamented. Again in Cave x¹⁴⁵ there is a peculiar kind of buckler ornamented with various designs and motifs and triangular in shape. The writer in the *Journal of Indian Art* remarks: 'the langure de hocuf or cross-hilted katar, which is supposed by some to be a peculiarly ancient weapon, nowhere appears'. But a careful examination of Plate xxiii¹⁴⁶ seems clearly to indicate the existence

144 *The Ajanta Frescoes*—India Society.

145 *Journal of Indian Art*, Vol. VIII.

146 *Ajanta Frescoes*.

of such a cross-hilted sword in the Ajanta paintings. In Fig. 25 (B) of the *Journal* the Vajra or thunderbolt is also shown.¹⁴⁷ The Ajanta paintings, now somewhat mutilated, are valuable for their reference to the political relations that existed between India and Persia in 625-26 A.D. Here the Persian envoys present Pulakeśin with valuable presents sent by their king. This is an unmistakable reference to the friendly relations that existed between the two States.¹⁴⁸

THE GĀNDHĀRA SCULPTURES

The Gāndhāra sculptures may next be examined. Burgess identifies a figure holding Vajra or the thunderbolt, its form not apparently primitive, with that of Mārā the tempter. Others identify it with Vajrapāṇi, the Bodhisattva, and Indra. There is, again, a figure in the Lahore Museum representing two soldiers, of which there is a Plate in the *Journal of Indian Art and Industry*.¹⁴⁹ Both are meagrely draped. They wear only loin-cloths. The knees and feet are left uncovered. In the one we notice a belt round the waist, a sheath with a sword the hilt of which is held in the left hand. On the back of the other soldier is seen a shield of almost oblong shape and also a sort of oval disc. But the face of this one is much mutilated. We noticed the part played by elephants in the Ajanta frescoes. There is a figure in the 'Mokalji's temple.'¹⁵⁰ at Chitore representing an elephant pitted against another—a story often

147 *Journal of Indian Art*, Vol. VIII.

148 Smith: *Oxford History of India*, p. 165.

149 Vol. VIII, Plate 10, Fig. 6. Burgess on the Gāndhāra Sculptures.

150 Smith: *A History of Fine Art*, p. 127.

mentioned in literature. In the course of her observations on the Gāndhāra sculptures and early coins from Alexander's time, Mrs. F. H. Andrews remarks: 'It is in architectural, sculptural and mural decoration in India that the elephant is seen at its best'.¹⁵¹

In South India there are numerous interesting and instructive sculptures, a systematic study of which would cover a large volume. Here an attempt is made to examine only a few of them to illustrate the Pallava, Chōla and Vijayanagar art. Vivid representations of Pallava art are seen in Mahābalipuram (Chingleput District). There is fire and passion in the wonderful representation of Durgā slaying Mahiṣāsura.¹⁵² There is another relief exhibiting Arjuna's penance to get possession of the magic weapon by which any powerful enemy could be easily humbled. The story is found in the *Mahābhārata*.¹⁵³

In the Chōla period, there is also a wonderful representation of a battle between a general riding on an elephant and his adversary on horseback.¹⁵⁴ This is on the Begur stone dated about A.D. 934-38, in the Mysore territory, now in the Bangalore Museum. There is another bas-relief sculpture in the same Museum found in the Atakur stone dated about A.D. 949-50 representing a fight between a big hound and a mighty boar in which both are being killed by each other.

A beautiful sculptural representation of Būtuga slaying the Chōla Rājāditya by stabbing him with a

151 *Journal of Indian Art*, Vol. X.

152 *Viśvakarma*, Pl. XLV; Smith: *Op. Cit.*, Pl. 87.

153 *The Indian Art*, a special number on Māmallapuram.

154 Smith: *A History of Fine Art*, p. 134.

dagger, short but with a broad and curved blade of fine steel,¹⁵⁵ is noticed in a plate in *Epigraphia Carnatica* copied in Pura in the Mandya Taluk and of the date Śaka 1339.¹⁵⁶ Here one notices the high wavy sword with sharp points. There is another kind of sword resembling a flexible hand, sometimes used as a belt apparently of leather. The weapon in No. 2 seems to be more rigid. Nos. 4 and 5 are copied from Varuṇa in the Mysore Taluk and are much earlier than the above, probably 960 A.D. Here the retainers are seen armed with cutlasses. There in the Middle Ages was a peculiar practice in South India of erecting Vīragals or memorial stones. Such memorial stones are even now found in great numbers in Southern India.

Perhaps the most vivid and lively representations of Vijayanagar art are those in the two temples at Tādpatri, Anantapur District—the Rāmeśvaram temple dedicated to Śiva, and the Cintatrāya temple to Viṣṇu. On the northern side of the Rāmeśvaram temple on the banks of the Pinākinī river, the Gopura is left unfinished from the middle. Here in the bas-relief on both sides of the two walls are seen demon soldiers, besides others wearing altogether different costumes. About a hundred varieties of dress are noticed here. In the other temple a furlong to the south, there is a remarkable representation of the whole story of the *Rāmāyaṇa* and also certain portions of the *Bhāgavata* finely sculptured. The reliefs are full of life and movement and exhibit fire and passion throughout. Except one or two figures the rest, several hundreds, are beautiful and present a freshness

155 *Ep. Car.*, III, No. 41. (Maṇḍya).

156 *Ibid.*, Part i, p. 34.

all their own. Chariots, war-horses, elephants, soldiers in battle array, actual operations in the field, all these afford remarkable subjects for study.

Such a variety of design and beauty is noticed in a bas-relief of scenes from the *Rāmāyaṇa* representing the conquest of Ceylon and all the varied incidents of that Epic in the Hoysaleśvara temple, Halebid, and the Hazara Rāmasvāmi temple at Hampi.¹⁵⁷ It is worth noting that weapons of war like the axe, the knife and the dagger, are seen depicted on the Viragals of this period.¹⁵⁸

Dr. Oppert refers to half a dozen temples in South India to prove the use of fire-arms in ancient India.¹⁵⁹ The Palni temple in the Madura District contains on the outer portion in an ancient stone maṇṭapa scenes of carved figures of soldiers carrying in their hands small fire-arms, apparently the small-sized guns mentioned in the *Śukranītisāra*. Bells are seen hanging from the belts worn round the waists of the soldiers. They wear slippers for their feet and a peculiar kind of cap on their heads. Again in the Śārṅgapāṇi temple at Kumbakonam in the front gate¹⁶⁰ of the fifth story from the top is the figure of a king sitting in a chariot drawn by horses and surrounded by a number of soldiers. Before this chariot march two sepoy with pistols in their hands. In the Nūrrūkkāl maṇṭapam of the Conjeevaram temple is a huge pillar on the north side of the maṇṭapa. Here there is a relief vividly representing a fight between two bodies of soldiers. Mounted horsemen

157 Smith: Op. Cit., Plates 84 and 91.

158 Ep. Car., III, p. 34.

159 Dr. Oppert: *Weapons, etc. of the Hindus*.

160 The gopuram, it may be noted, belongs to the 18th century.

are also seen. The foot-soldier is shown aiming his fire-arm against the enemy. Such things are also noticed in the Tanjore temple and the temple at Perur, in the Coimbatore District. In the latter there is an actual representation of a soldier loading a musket. To this last Fergusson assigns the eighteenth century A.D. But Dr. Oppert puts it very much earlier.

From these sculptures in India it is interesting to turn to Java where the Indian tradition is copied wholesale. The Borobudur sculptures illustrate Jātaka scenes. They are ascribed roughly to the eleventh century A.D. There is a striking relief series Pl. I, fig. 5,^{160a} representing a battle in which two others are seen on each side, one wearing a curved sword in the right hand and a long shield, and the other a mace and a round shield resembling a wheel, all apparently made of iron. The story of the *Rāmāyaṇa* is also given, as in the Tādpatri temple from Rāma's going to the forest down to the killing of Rāvaṇa. There is also a wonderful sculpture of an ancient Hindu ship.¹⁶¹

In the temple of Ankor Wat, in Cambodia, the Kambojas who colonised it about the fourth century A.D. kept up the traditions of the Kashmir schools. The motifs in the various reliefs are stories and battle scenes as described in the *Rāmāyaṇa* and the *Mahābhārata*.¹⁶² These are described in minute detail and with wonderful vigour. Perhaps they follow the technicalities of the Amarāvati sculptures. Magic plays a prominent part in these reliefs. Indrajit showing the magical head of

160a Vol. I, Plate V (N. J. Krom and T. Van Erp).

161 *Ibid.*

162 Havell: *Indian Sculpture and Painting*, p. 137.

Rāma to Sītā and slaying the Māyā Sītā before Rāma are life-like. There are two figures of the heads of Bhīmasena in Central Java. The heroic splendour and manly grace of the born fighter are wonderfully depicted. Havell aptly remarks: 'We recognise a young Alexander, a fighter who knows his own strength and revels in it. All his desires and aims are human yet there is nothing low or brutal in his nature. He is a great natural hero and war-lord fit to lead and command a noble free-born race. To compare these with the head of the Buddha shows how far the artistic skill has advanced in Java and therefore in India. This figure has a lovely appearance, the portrait type of all that is pure, spiritual and holy in Indian thought and religion'.¹⁶³ Again, in Ankhor Vat we find in a bas-relief straight two-handed iron swords worn by foot-soldiers. Students conversant with Alexander's invasion of India know that these were in use in India in the fourth century B.C. We may add that this weapon was used as a sword of state by the kings of Siam. It justifies Ruskin's words: 'Whole eras of mighty history are summed and the patience of dead myriads are concentrated in the existence of a noble (national) art.'

ICONOGRAPHY

In this connexion a word may be said about Indian Iconography which affords adequate material for the study of the forms and the uses of several weapons current in Ancient India and is therefore of great interest and significance. A detailed study of the different images has been made by Gopinatha Rao and Bhattacharya.

163 *Ibid.*, Plates 41 and 42.

We are concerned here only with the arms and armour worn and the symbols they stand for. We may take some prominent images and examine them briefly.

Though the several hymns in the R̥g Veda bear eloquent testimony to the existence of image worship, it became highly popular only during the epoch of the Purāṇas. Besides Skanda several other war-gods and goddesses waged wars against demons Asuras and Rākṣasas. In this category come Viṣṇu, Sūrya, Gaṇeśa, Śiva, and several goddesses of whom Durgā is the most prominent. Abbé Dubois¹⁶⁴ speaks of thirty-two gods to each of whom one weapon or another is peculiar. Viṣṇu is popularly addressed as Śankha-cakra-gadā-pāṇi, that is, having Śankha or conch, Cakra or disc, and Gadā or wooden mace in three of his four hands. In another verse the Śārṅgi and the Nandakī (bow and sword) are also attributed to him. By blowing the conch he strikes terror into the enemy. The Cakra attributed to Viṣṇu is of two different forms, as is seen in the sculptured images.¹⁶⁵ The spokes of one are like the wheels of the ordinary car, while those of the other resemble the petals of a lotus. The Cakra belongs to the category of a missile. According to *Vāmanapurāṇa*¹⁶⁶ as well as the sculptured figure, the Cakra has lustrous and sharp edges. The gadā is the wooden mace or heavy staff with a tapering top and a stout bottom. The Śārṅga or the bow of Viṣṇu has a single bend, three bends, and five bends respectively, showing a perceptible evolution of the form of the weapon.¹⁶⁷ Nandakī is the name of the

164 *Hindu Manners, Customs and Ceremonies*, p. 689.

165 Gopinatha Rao: *Hindu Iconography*, Vol. I. *Ayūdhapurāṇas*.

166 Ch. 79.

167 Gopinatha Rao: *Op. cit.*

sword attributed to Viṣṇu. Though the *Varāha-purāṇa*¹⁶⁸ gives an allegorical interpretation of it (*i.e.* that the conch stands for the destruction of avidyā or ignorance, the sword for dispelling ignorance, the disc for the circles of time, the club for routing irreligious monarchs), yet the fact remains that such weapons were in common use in this land.

Again, the conception of the sun-god in Indian mythology is of value to the student of ancient Indian military history. The idea is that the sun-god wants to destroy darkness. Therefore he dons a lustrous armour and with his two queens behind, starts marching in his swift flying chariot drawn by seven powerful steeds, Aruṇa (dawn) being his charioteer. In front of the car march two soldiers, one with a sword and the other with a śūla or trident, a kind of spear with three keen edges. The piercing rays of the sun are the shooting arrows. Such a grand conception is well represented in stone in the Sun Temple at Kanarak, of which there are two excellent plates in the published work of Lord Ronaldshay.¹⁶⁹ The first plate shows the sun-god with his accoutrements in a standing posture, while the second is a representation of the chariot with huge stone wheels all carved and ornamented. Though sun temples are rarely found, the sun-god is still worshipped in India with great veneration as the deity capable of bestowing on mankind both health and wealth. Thus the whole thing presents a life-like portrait of the military dress as well as the

168 See Vedānta Deśika's *Ṣoḍaśāyudhastotra* where the allegorical interpretations are developed.

169 *A Birds-eye-view of India*, Plates 1 and 21.

march against an enemy. Śiva is represented in various aspects, as holder of the Pināka or the bow, of the Khaṭvāṅga or the heavy club, as Mṛgadharma or wearer of a shield of antelope-skin, and of the śūla or trident. There is in the Elephanta Caves a splendid fragment of a huge sculptured image of Śiva the destroyer.¹⁷⁰ In the same way the elephant head of Gaṇeśa is a symbolical representation of victory. Hence at the commencement of every undertaking the orthodox Hindu offers prayers to this god to bless him with success. He is the Lord, again, of the Gaṇas or troops of inferior deities.¹⁷¹ There is a good image of him (see Plate I in the *Industrial Arts of India*) with ankuśa and paraśu in his hands. Subrahmanya or Skanda, the celebrated war-god of the Purāṇic literature, has a peacock for his vehicle (vāhana), just as Viṣṇu has the Garuḍa or the golden eagle. He is represented with six heads. He wears the weapon Śakti resembling a spear, and his standard of victory flies over his head. Other weapons attributed to him are the bows and arrows. He is the *devasenāpati*, the commander-general of the celestials. His is the symbol of energy and strength. These gods are very familiar even to children in India, for every village temple contains some of them.

Lastly, we may consider Durgā, the war-goddess, who is represented in several temples. Special mention may be made of the one found in Mahābalipuram; there was another at Singasari in Java, now in the Ethnographic Museum at Leyden. It is a masterpiece in a great stone alto-relievo of Durgā killing the demon Mahiṣa.

170 Havell: *Indian Sculpture and Painting*, p. 49.

171 *Mārkaṇḍeyapurāṇa*, 82.

It roughly belongs to the 10th century A.D. or later. It is worth while comparing this with the description of Durgā's battle with the Asura in literature.¹⁷² In the battle that raged between Mahiṣāsura and Indra the latter was defeated and consequently the Asura became the god of heaven. All the gods became enraged and created a goddess, each out of his own element. Śiva endowed her with a trident, Viṣṇu with a disc, Varuṇa with a noose, Agni with a spear, Marut with bow, arrows and quiver, Indra with the thunderbolt and the bell of his elephant, Yama with pāśa or rope, Kāla with a lustrous sword and shield, and Viśvakarma with a battle-axe. She rode on a lion with a voice that struck terror. In the battle thousands of Asuras with horses, elephants, and chariots offered resistance. The Mahiṣāsura himself was equipped with the tomara, bhindipāla, śakti, musala, gadā, paraśu, and paṭṭiśa. Durgā attacked him with all her fury and a river of blood flowed in the field. Cinchchuna, the general-in-chief of the Asura host, was killed with the trident, his staff, chariots, and horses being broken. Lastly came Mahiṣa assuming the forms of a man, an elephant, and a buffalo, and fought bravely, but in vain. His head was cut off and the whole of heaven and earth was filled with indescribable joy.

Another manifestation of Śiva is Virabhadra, an image of which stands on the Kalmunda with Bhadrakālī in the Perur temple, in Coimbatore District. It agrees with the description in literature.¹⁷³ He has one head but thirty-two hands, matted hair, and three eyes. In

172 See, for instance, *Devī Bhāgavatam*, Bk. V. Ch. VIII.

173 *Bhā.*, P. IV. 5. (whole).

the sixteen hands on his right side he wears respectively the symbol of protection from fear (abhaya-prada), sword, trident, cakra, damaru, bow, arrow, ploughshare, lotus, scad of knowledge, barbed spear, dagger, rudrākṣamāla, khaṭvāṅga, club and battle-axe. In those on the left side he wears respectively the symbol of blessing, a piece of wood, the hammer, the goad, the noose, the snake, the fire, the deer, the bell, the bow, the gun, the lotus, a water pot, the shield, and others.

NUMISMATIC EVIDENCE

Examining the various coins found in India we notice some kinds of arms and armour exhibited in them. In the Persian and Macedonian types of coins¹⁷⁴ the obverse side contains a mounted horseman wearing curio, with lance in rest, pursuing two mounted men on an elephant. This is identified with Porus's pursuit on an elephant but cannot be conclusively accepted. On the reverse is one wearing a spear and a thunderbolt. The Indian types of Bactrian kings are illustrated by Appolodotus I wearing the bow and arrow and Antimachus naked to the waist wearing a trident in the right arm and perhaps a shield hanging from his left. In the face of this numismatic evidence, Baden-Powell's conjecture that the śūla was only a temple symbol and not a war weapon, falls to the ground. Moreover, it was probably the symbol of the Kushan kings, of the first century A.D., as testified to by their coins.¹⁷⁵ Again, in the numerous Indo-Scythian coins¹⁷⁶ the kings wear coats

174 *Cambridge History of India*, I, Plate I.

175 *Ibid.*, p. 582.

176 *Ibid.*, Plate III.

of mail, or chain armour, helmets with straight swords and lances, some standing and others on horses or elephants. There are also short curved spears, clubs, and other weapons. Some of them belonged to the second or third century B.C. or even much earlier.

We conclude with the words of Sir George Birdwood: 'For variety, extent, and gorgeousness, and ethnological and artistic value, no such collection of Indian arms exists in this country (England) as that belonging to the Prince of Wales. It represents the armourer's art in every province of India, from the rude spear of the savage Nicobar islanders to the costly, damascened, sculptured, and jewelled swords, and shields, spears, daggers and match-locks of Kashmir, Katch and Vizianagaram. The most striking object in the collection is a suit of armour made entirely of the horny scales of the Indian armadillo, or pangolin, encrusted with gold, and turquoises, and garnets.'¹⁷⁷

Thus it is obvious that the artistic instinct was developed to a wonderfully high degree in ancient India of which any Indian may be proud. But this steady and onward march of Indian art and sculpture was sometimes arrested by the continuous inroads of foreigners. Even in such troublous times the arts of peace were not neglected. There was a temporary setback since the advent of the East India Company. But to-day with the growth of nationalism there is a significant awakening in this direction.

CHAPTER IV

ARMY AND ARMY DIVISIONS

SECTION I

INTRODUCTORY

REGULAR and proper organisation are the life and soul of an army. It was this great lesson that Prussia taught to an astonished Europe. I advisedly use the words 'regular and proper'. A regular army means a class of fighting men devoted to the service of the State, like the ancient Spartans who realised long ago what Bacon wrote centuries later: 'Walled towns, stored arsenals, and armouries, goodly races of horses, all this is but a sheep in a lion's skin except the breed and disposition of the people be stout and warlike.' A proper army means that it must be efficient. There should be no waste, no inefficiency. With these preliminary remarks let us proceed to examine the ancient Indian army organisation.

THE GAME OF CHESS AND THE FOUR-FOLD FORCE

Owing to peculiar geographical features,¹ with her vast plains interspersed with forests, the ancient Indian State had to make extensive use of mounted forces which comprised cavalry, chariots, and elephants. This does not mean that infantry was neglected or it formed an

1 For the influence of geography on the Indian Wars see H. C. Ray: *Notes on War in Ancient India*, Journal of the Department of Letters, 1927.

unimportant limb of the army. Hindu India possessed the classical fourfold force of chariots, elephants, horsemen, and infantry,² collectively known as the Caturangabala. Students know that the old game of chess also goes by the name of Caturanga.³ Chess is a game of war, and in each game there are a king, a counsellor, two elephants, two horses, two chariots, and eight foot-soldiers. The major pieces occupy the opposite edges of the board and in front of them are posted the foot-soldiers. The corner squares are occupied by the chariots, the next squares are occupied by the horses with the well-known move of the Knight, and the third squares by the elephant. In the two central squares are the King and the Counsellor. The foot-soldiers are arranged on the second and seventh rows. On the whole the board is 8×8 squares.⁴ According to Tylor,⁵ the game of chess was the invention of some Hindu who devised a game of war with the *aṣṭāpada* board as his field of battle. From the reference to this game in the *R̥g Veda* and the *Atharva Veda* and in the Buddhist and Jaina books, it must have been very popular in ancient India. The Persian term *Chatrang* and the Arabic *Shatrang* are forms of the Sanskrit *Caturanga*.^{5a} This shows that India was the original

2 *Ar. Śās.*, p. 140; *Kāma*, 19, 23 and 25; *Śukra* IV. 7; *Agni Purāṇa* 228, 6; *Jātaka* VI. 298; Vol. II, p. 66, 70, 71; III, 157, and 161 etc. *Yukti*, p. 6.

3 See in this connexion *A History of Chess* by H. J. R. Murray (Oxford, 1913).

4 See for details *op. cit.* pp. 25 ff. For some diagrams of chess see *Alberuni's India*, ed. Sachau; also Parker, Ceylon.

5 *Anthropology*, 1892, p. 307.

5a *Śūlapāṇi, Caturangadīpikā* (Cal. Sanskrit series 21).

home of this game which spread throughout the ancient world.

However this may be, we are here concerned with the question whether the fourfold force supplied the motive for the game or *vice versa*. It is to be noted that the relative values of the chess pieces were analogous to or identical with the relative values of different arms as laid down by Kauṭalya, Śukra, and Vaiśampāyana. This may mean that the values of different kinds of forces (made arbitrarily) were borrowed from chess. While mathematically the relative values of chess pieces can be worked out, there is less possibility of proving the relative values of different kinds of forces in war. We have to take it accordingly that the assumptions of Indian strategy were borrowed from chess, and not *vice versa*. We find that wherever chess has spread, its influence has led to the ascription of the same relative values to different types of military forces, e.g. in Persia and China. The organisation of the Indian army which came to be known as Caturanga, both in epic Sanskrit and Pāli literature, was based on the ancient game.

The two methods of winning in early chess were the checkmate and the barring of the opponent's king.⁶ An exact reproduction of these methods is seen in ancient warfare, the prime object of which was the vanquishing of the enemy forces, secured by the capture or death of the opponent or by the devastation of his army. We may also add that a symmetrical arrangement of the different forces and its advantages must have been taken from chess.⁷ It may be asked, in this connexion: Can

⁶ *Op. cit.* p. 45.

⁷ I am indebted to Rao Bahadur Professor K. V. Rangaswami Aiyangar for this suggestion.

it not be the other way round, or can it not be mere accidental identity? The answer is simple. This was not possible, as we meet with the term *Caturanga*, a fourfold force, only in epic literature and not in the earlier Vedic literature. And it may be pointed out that the Vedic works are full of references to the game of chess. Therefore it is natural that the principles of chess supplied ideas to the progressive development of the modes and constituents of the army.

SECTION II

FURTHER DIVISIONS

The traditional fourfold force was not a static division. Later on the army was regarded as a sixfold force, *mantra* or the force of counsel and *kośa* or the power of the treasury being added to the original four divisions.⁸ The addition to the army of these two divisions was probably due to the early recognition by Hindu statesmen of the importance of a good treasury and expert counsel in military matters. The consultation was, of course, advisory. But the King would not take a line of his own independently of his Council. In cases of difference of opinion he had to convert the Council to his view and then act. This is clear from the Council held by Rāvaṇa on the eve of the War of Lankā,⁹ and from the proceedings of the meetings held by Rāma to entertain Vibhiṣaṇa as an ally.¹⁰

8 एतन्मौल्यदिषद्भूमेदं चतुरङ्गं बलं विदुः ।

षडङ्गं मन्त्रकोशाभ्यां पदात्यश्वरथद्विपैः ॥ *Kāma*. 19.24.

9 *Rāmāyaṇa*, *Yuddha*, chh. 35-36.

10 *Rāmāyaṇa*, *Yuddha*, chh. 17-18.

In another place¹¹ an eightfold division is mentioned. Besides the *Caturanga* there is *viṣṭi* or commissariat and transport, navy or admiralty, *cāra* or spies, and *deśika* or elders and advisers.

It is interesting to study the judicious distribution of work and responsibility without causing any internal friction which constituted the greatest merit of the ancient Indian army. An examination of the different constituents of the army may therefore not be out of place here.

SECTION III

CHARIOTS

Chariots were used in warfare from very remote times. There are many references to chariots in the *Samhitas* and in the *Brāhmaṇas*. In the *Rg Veda* there is a hymn addressed to the war chariot:¹² ‘Lord of the wood, be firm and strong in body: be bearing as a brave victorious hero. Show forth thy strength, compact with straps of leather and let thy rider win all spoils of battle.’ We meet with a similar hymn in the *Atharva Veda*.¹³ ‘O forest tree! stout-limbed verily mayst thou become our companion, further, rich in heroics; thou art

11 प्रकाशश्चाप्रकाशश्च दण्डोऽथ परिशब्दितः ।

प्रकाशोऽष्टविधस्तत्र गुह्यश्च बहुविस्तरः ॥

रथा नागा हयाश्चैव पादाताश्चैव पाण्डव ।

विष्टिर्नावश्चराश्चैव देशिका इति चाष्टमः ॥

अज्ञान्येतानि कौरव्य प्रकाशानि बलस्य तु ॥ Śānti. Ch. 58. 40-41.

12 VI. 47. 26.

13 Bk. VI. 125.

fastened together with kine; be thou stout: let him who mounts thee conquer things conquerable.' 'Forth from heaven, from earth (is its) force brought up: forth from forest trees (is its) power brought hither: to the force of the waters, brought forth hither by the kine, to Indra's thunderbolt, the chariot, do thou sacrifice with oblations.' 'Indra's forces, the Maruts' front, Mitra's embryo, Varuna's navel do thou, enjoying this oblation, giving of ours, O divine chariot, accept the oblations.'

The chariot was an indispensable instrument of war in the days of the Vedas, and on its possession depended victory. Indra is said to attack the chariot of Keśin.¹⁴ Originally the warrior was his own charioteer whose office had not yet been separated from that of the fighter. Thus when the dreadful Asuras attacked the celestials, both Indra and Agni yoked and guided their horses themselves. The separation of the two offices must have been effected about the time of the *Aitareya Brāhmaṇa*¹⁵ where mention is made for the first time of a charioteer distinct from the warrior. The large¹⁶ number of references to chariots in the *Aitareya Brāhmaṇa* would seem to indicate that the chariot was an important instrument of war in those days. This inference is supported by the *Taittirīya Brāhmaṇa*¹⁷ which mentions a class of people called *rathakāras*, or chariot-makers; and this may be taken as proof that war-chariots were in great demand. Wars carried on mainly with the help of chariots, as during and before the days of the

14 *Ibid.*, 75. 1-7.

15 IV. 1; XXI. 1 (A. B. Keith).

16 II. 37; X. 5; V. 21; XXIV. 3; VII. 19; XXXIV. 1 etc.

17 *C.H.I.*, I, p. 125.

Brāhmaṇas, could not have been very complex, and hence the *dvandvayuddha* of Sanskrit literature must be taken to have been a normal feature of this rather than of the later period. The *dvandvayuddha* or single combat became gradually obsolete as a method of warfare, owing doubtless to the progress made in the art of war and the consequent growth in the scale and magnitude of military operations. It is, however, evident that the practice died only slowly. The *Rāmāyaṇa* has accounts of many single combats.

The importance and value of chariots in warfare can be seen also in the epics. In the *Rāmāyaṇa* and the *Mahābhārata* their use is largely in evidence. Here mention is made of official charioteers, i.e., a king accompanied by a charioteer, similar to a custom depicted in Assyria on the marbles from Nineveh. Thus whereas we had in the R̥g Vedic age a single rider, in the age of the Brāhmaṇas and epics we meet with one warrior and an accompanying charioteer. In the *Atharva Veda* Indra was the left stander and the moon-god was the charioteer.¹⁸ In the fourth century B.C. two fighting men are seen in each chariot besides the charioteer. This is testified by the fragments of Megasthenes.¹⁹ We know that Kṛṣṇa was the charioteer of Arjuna in the Kurukṣetra war and earned the appropriate title of Pārthasārathi.

Vāsudeva, Arjuna, and Mātali are some of the great charioteers mentioned in the two epics. Judging by the tests laid down by Vālmikī,²⁰ they appear to have been ideal charioteers, for they possessed all the quali-

18 Bk. VIII. 8. 23.

19 Frag. 34 (McCrindle).

20 *Yuddha*. 106, 16-20.

fications required, and sometimes more. We read, for example, that Vāsudeva's great skill as a charioteer consisted in leading the horses in his charge in such circles as to avoid the shafts of the enemies from any quarter. *A propos* of the skill of charioteers, we may mention that there is a reference in the *Mārkaṇḍeya Purāṇa*²¹ to the death of a warrior who was versed in the eight modes of fighting from a car.

It would be interesting to trace the relation of the charioteer to the Knight, and the status he held. There are different terms like *rathin*, *sūta*, and *sārathi* used to denote the charioteer; and of these *sūta* is the most misunderstood. As I have said elsewhere,²² it is a fundamentally wrong theory to identify this *sūta* with the celebrated *Sūta paurāṇika*. The latter is a sage and *ayonija*. The charioteer *sūta* belonged to one of the mixed castes who became horse-trainers, physicians, charioteers, etc. He occupied, in epic times, a place of

- 21 रथोद्धनखिन्नाश्च त इमे रथवाजिनः ।
 दीना धर्मपरिश्रान्ता गावो वर्षहता इव ॥
 निमित्तानि च भूयिष्ठं यानि प्रादुर्भवन्ति नः ।
 तेषु तेष्वभिपन्नेषु लक्षयाम्यप्रदक्षिणम् ॥
 देशकालौ च विज्ञेयौ लक्षणानीकृतानि च ।
 दैन्यं खेदश्च हर्षश्च रथिनश्च बलाबलम् ॥
 स्थलनिम्नानि भूमेश्च समानि विषमानि च ।
 युद्धकालश्च विज्ञेयो परस्यान्तरदर्शनम् ॥
 उपयानापयाने च स्थानं प्रत्यपसर्पणम् ।
 सर्वमेतद्रथस्थेन ज्ञेयं रथकुटुम्बिना ॥

22 *Some Aspects of the Vāyu Purāṇa* (Madras University).

honour on different occasions. We know from the *Rāmāyaṇa* the great esteem Sumantra,²³ the sūta of Daśaratha, enjoyed with the royal household.

FUNCTIONS OF THE CHARIOTEER

His chief duty was to lead the war chariot and to shield his warrior. He was ordinarily to obey the warrior's behests. Sometimes the charioteer had his own way and acted against his Knight's wishes. When the hero commanded him to drive the chariot in a particular direction, carelessly and irrespective of the consequences the charioteer expostulated, but agreed only when compelled to take that line of action.²⁴

He was an expert who drove his horses with the whip and reins in his left hand. But when this hand was wounded, he still drove on, holding the goad and reins in his right. 'His true art', says Hopkins, 'consisted in wheeling and turning, in bringing the car rapidly about, so as to attack the antagonist with such speed from all quarters that the chariot seemed to advance from all sides at once. The names of the circles are apparently technical... The effect of circling was produced by goading the steeds and hauling on the reins.'²⁵

THE EVIDENCE OF ARTHAŚĀSTRA

The *Arthaśāstra* mentions a special officer called the Superintendent of Chariots (Rathādhyakṣa) and lays

23 *Rāma. Ayodhya* 59. (whole).

24 *Mhb. Droṇa* 35, 31-2; 36 (whole). Cp. *Kaṇa* 27. Here we have the legend of Brahmā acting as charioteer to Rudra bent upon blowing the Tīrpara, the Asura citadel.

25 *Op. cit.* p. 253.

down, in vexatious detail, rules regarding the sphere of his duties.²⁶ From the number and minuteness of these rules we may infer that by this time the business of supervising the chariots of the State had become so unwieldy as to require a special officer. According to the *Arthaśāstra* the normal height of a chariot was 10 puruṣas while its width ranged from 6 to 12 puruṣas. Six varieties of chariots are mentioned, of which three were used in war, one in the period of training, the second for marching towards the enemy, and the third in the theatre of operations. The chariots were two-wheeled, four-wheeled, and eight-wheeled. Each car was accompanied by ten or fifty elephants.²⁷ The duties of the officer in charge of the chariots were many and varied. He was to see that warriors were trained to fight from chariots. He was to maintain accounts relating to the construction of chariots, their establishment charges, and other things connected with his department.

The value of a chariot as a unit of the army was great. It could ably and effectively resist the attacks of the enemy, suddenly occupy positions of advantage and quickly abandon disadvantageous situations, easily rally the soldiers fallen into disorder, break through the ranks of the enemy, and threaten the enemy's rear.²⁸

Megasthenes refers to the chariots as follows:—
 'The chariots are drawn on the march by oxen but the horses are led along by a halter, that their legs may not be galled and inflamed, nor their spirits damped by drawing chariots. In addition to the charioteer there

26 Bk. II. 33.

27 *Mhb.*, *Udyoga*. 155. 15-24.

28 *Ar. Śās.*, Bk. X. 4; *Kāma*. 20.4; *Niti*. VI. 62.63.

are two fighting men who sit in the chariot beside him.' ²⁹ It is of interest to note that chariots were drawn by oxen. It was realised that the special quality of the horse was not endurance, but speed, and that horses whose energies had been spent in marching would be useless in the field.

In addition to chariots drawn by horses there were others drawn by asses and bulls. The *Rāmāyaṇa* tells us that Indrajit's chariot was drawn by mules.³⁰ The *Mahābhārata* refers to a war car drawn by sixteen white bulls. The employment of asses and bulls may also be attributed to the lack of suitable horses.

DIFFERENT TYPES

Chariots were of different types and materials. Śukra mentions³¹ an awe-inspiring chariot of iron with swift-moving wheels, provided with good seats for the warriors³² and a seat in the middle for the charioteer; the chariot was also equipped with all kinds of offensive and defensive weapons.³³ The *Harivaṃśa*³⁴ speaks of the iron car of the Dānava Tata having eight wheels, axles and poles and being furnished with a crow standard. It was two miles in length and drawn by

29 Frg. 34 (McCrindle).

30 *Yuddha*. 73.8. The *Atharva Veda* evidences a chariot yoked with she-mules (Bk. VIII. 8. 22). It is to be noted that the Babylonians used ass-drawn chariots from time immemorial. Hall: *The Ancient History of Near East*, p. 181 (1932).

31 IV. 7. 30-31.

32 For a description of a chariot warrior see *Mhb.* IV, 54. 10-22 especially st. 22.

33 *Ibid.*, *Droṇa*. 112. 48.

34 Ch. 43.

1000 mules. Iron nets were hung from its windows and a variety of weapons were found in it. This is an exaggerated description apparently of a very strong and huge chariot, and shows that chariots were freely used in wars.

From the time of the epics to the epoch of the Purāṇas the art of fighting from chariots had developed a high degree of perfection. But we must not be blind to their defects. If the ground became slippery by incessant rain, the chariots got stuck in the mud and became immovable from their great weight. This is what happened in the battle of the Hydaspes. Owing to the storm of rain, 'the chariots in rushing into action jolted over broken and slippery ground.' The horses again took fright and precipitated the carriages not only into the sloughs and pools of water but even into the river itself.³⁵

Each chariot was marked off by its ensign and banner. Though a reference is made to the position of the flag-staff in a car,³⁶ its exact place is only a matter of conjecture. It may be, as Hopkins thinks, that a staff was fixed at the back of the chariot rising aloft from the floor. The main staff was fixed in the middle of this back portion and small flags flew on either side. It must be remembered that the first object of attack by the enemy's arrows was the flag pole, which was made of bamboo, if *vaiṇavī yaśṭī*³⁷ means anything. If the banner fell, the hero lost his prestige and there arose

35 See McCrindle: *Ancient India*, The Invasion of Alexander, p. 208.

36 *Bhāṣma*, 101. 47-48; *Sāṃptika* 13.4.

37 *Ādi*, 64.17.

confusion in the rank and file. On the top of the staff was placed the *dhvaja* or *ketu* bearing an image. Whether *dhvaja* and *ketu* were one and the same thing, or the *ketu* formed a part of the *dhvaja*, it is not possible to say. The *dhvaja* came to be so important that the army went by the name of *dhvajinī*.³⁸ The symbols were either animals or trees and flowers. Bhīṣma's ensign was the palm. Bells and garlands sometimes adorned the flag.³⁹

Besides flags, umbrellas (*chattra*, *ātapatra*) and fans were a part of the paraphernalia of the war chariot. The umbrella, which was a prominent feature of all festive occasions, was also seen in the field of action. It was often of white material, the stick sometimes being golden.⁴⁰ Among the spoils of war one had to gather the umbrellas in the battle-field. In the old Tamil literary works we are told that often the umbrella sticks and the flag staff recovered from the enemy became the *talaikkol* used by dancing girls in Tamil India.⁴¹ This only indicates that the ancient Tamils attached as much importance to these paraphernalia as their northern brethren.

ITS DECLINE

Gradually the uses of chariots in war declined, and we have no mention of it in Bāṇa's *Harṣacarita* (7th century A.D.) in his description of *Harṣa's* army.⁴² Nor

38 *Udyoga*, 155. 25.

39 *Droṇa*, VII. 105 (whole).

40 *Bhīṣma*, 55. 31.

41 See Dikshitar, *Śīlappadikāram*, pp. 102-3.

42 Cowell and Thomas—Trn. pp. 224-25.

was it seen in the army of Pulakeśin II (641 A.D.), if we may rely on the authority of Yuan Chwang.⁴³ Again, in the Kūram Pallava grant⁴⁴ about 650 A.D., which describes the battle of Peruvaḷa Nallūr, only elephants, horses, and footmen are mentioned and not chariots. Further in the history of the Chōla kings of South India, during the succeeding centuries mention is only made of the other three divisions of the army. The chariots, as instruments of war, are not mentioned—a clear indication that they must have become obsolete by that time. Still the evidence is strong that in India from the earliest times down to the end of the epoch of the epics and even several centuries after, chariots played a very prominent part in warfare.

SECTION IV

ELEPHANTS

The next important force of war consisted of elephants. From very early times the elephant was used in peace as a vehicle and in war as a combatant.⁴⁵ It was an excellent means of transport over rugged tracts. The numerous representations of the animal on

43 Watters II, p. 239. See also *Dept. of Letters*, 1927, pp. 38-39.

44 *S.I.I.*, Vol. I, p. 153.

45 For the origin and value of elephants in war see Pālakāpya quoted in the *Lakṣaṇaprakāśa*, pp. 321-28. The Parāśarasamhitā refers to four kinds of elephants, also mentioned in the *Viṣṇu-dharmottara* and *Brahmāṇḍa Purāṇa*. These are Bhadra, Manda, Mṛga and Mīśra with their respective characteristics. Cp. also Brhaspati Samhita quoted in *Lakṣaṇaprakāśa*, pp. 329 ff. The Brhaspatisamhita classifies them according to the nature of territory—those of forests, of mountains and of rivers (*Ibid.*, p. 357).

coins and in architectural and sculptural works from Gāndhara to Rāmeśvaram as well as in Indonesia are an indication of the esteem in which it was held by the ancient Indians, clearly on account of its usefulness. There is a reference in the *Rg Veda* to two elephants bending their heads and rushing together against the enemy,⁴⁶ which is a fairly early reference to the animal being used in war. In the earlier texts of this Samhita the elephant is spoken of as a wild animal with one hand, while in the later ones it is designated as 'hastin'.⁴⁷ By the time of the *Yajur Veda Samhita* the art of training elephants had become common.

The *Arthaśāstra*⁴⁸ mentions a special officer of the State for the care of elephants, and lays down his duties and other particulars connected with that office. Later works like that of Pālakāpya refer to a Gajāmātya, while the *Viṣṇudharmottara* speaks of him as Gajādh-yakṣa, both denoting the same official. He should be versed in the different sounds of the animal. He must also be pure and skilled in accounts. A good trainer of elephants, he must be able to distinguish different classes of the animal and capable of enduring trouble, self-controlled, experienced, an interpreter of signs and omens and one who can attend to the ills of an elephant—such a man may be appointed as its rider.⁴⁹ According to Kauṭalya the officer was to protect elephants and the

46 X. 106. 6.

47 C.H.I., I. p. 81.

48 हस्त्यध्यक्षो हस्तिवनरक्षां दम्यकर्मक्षान्तानां हस्तिहस्तिनीकलभानां शाला-
स्थानशय्याकर्मविधायवसप्रमाणं कर्मस्वायोगं बन्धनोपकरणं साङ्ग्रा-
मिकमलङ्कारं चिकित्सकानीकस्थायुकवर्गं चानुतिष्ठेत् ॥ Bk. II. 31.

49 See *Lakṣaṇaprakāśa*, pp. 400-2.

elephant-forests. He was to regulate the quantity of rations and grass to be supplied to elephants, supervise their stables and accoutrements, and watch the work of the grooms and mahouts. He was to see that the sick and wounded elephants were treated by the veterinary surgeon specially appointed for the purpose. He was also to disburse the wages and salaries of those who were employed in the elephant stables. He was to see that the animals were washed both morning and evening and fed immediately after their wash. They were to be watered in the afternoon after their daily exercise which was in the forenoon. The remaining portion of the day was the time for rest. The animals caught were arranged in three classes.⁵⁰ The *Arthaśāstra* gives directions for the construction of stables and also particulars for feeding the elephants. The intelligence of the animals was to be gauged by their appearance and external marks.

Seven ways of training elephants for war are mentioned:—⁵¹

Upasthāna—rising and jumping over fences and other eminences.

Samvartana—sitting and leaping over pits.

Samyāna—marching straight or zigzag.

Vadhāvadha—trampling under foot horses and foot-soldiers.

Hastiyuddha—pitting elephants against one another.

50 Uttama, (Bhadra), Madhyama (Manda) and Avara or the lower animals, see Gaṇapati Sastri's Gloss. *Ar. Śās.* Bk. II. 31.

51 *Ar. Śās.* Bk. II. 32 See also Someśvara's *Mānasollāsa* Sts. 307 ff.

Nāgarāyaṇa—rushing against forts and buildings.

Sāmgrāmika—used in open warfare.

The Mahout was to have a staff and the *ankus* or goad. The animals were to be caparisoned with various plates, ornaments, and bells.⁵² There were flags seen upon the elephants, and these were called *Vaijayantīs*, smaller in size to those attached to war-chariots. There seem to have been special flags intended to be borne by war elephants.⁵³

Megasthenes explains⁵⁴ how the elephants were hunted, and how their distempers were cured by simple remedies such as cow's milk for eye-disease and pig's fat for sores. He further speaks of a committee to supervise elephants and refers to royal stalls and to a war-elephant carrying four men, three archers, and a driver. It is interesting in this connexion to note what Plutarch writes of the elephant of Porus in his battle with Alexander.⁵⁵

‘His elephant, waxing furious though not yet wounded, kept changing the ranks of the enemy until the driver, perceiving the king's condition, turned the beast round and fled... The Indian driver thinking the king wished to alight, made the elephant kneel down in the usual manner... Alexander, supposing that he was dead, ordered his body to be stripped—when the elephant turned upon them in defence

52 Bk. II. 32.

53 *Mhb. Bhīṣma*, 112.27;

54 See Arrian XIII; McCrindle pp. 218-19 (Cal. 1926). Cp. *Vāyupurāṇa* 16.20 where allusion is made to the training of wild elephants by a hook.

55 McCrindle: *Invasion of Alexander*, pp. 212 ff.

of his master and lifting him up placed him once more on its back.'

How much importance and value was attached to these animals in war can be gathered from the words of Alexander himself before he crossed the Hydaspes. In the course of the instructions he gave his followers, he said: 'It is the elephant only which makes it impossible for the horses to land on the other bank. The rest of the army can cross over without difficulty.'⁵⁶ We are told how these huge beasts at first crushed the Macedonian phalanx though in close formation and created terror among the soldiers of Alexander until they became quite exhausted. Thus a detailed study of the battle of the Hydaspes shows the superiority of the elephant corps over the other divisions of the army.⁵⁷

The *Agni Purāṇa*⁵⁸ considered to be as late as C. 900 A.D. has some interesting details. Six warriors could ride at a time on an elephant, two with maces on its neck, two archers on its back, and two with swords behind them. While the elephant marched, it was defended by three horsemen. If this reckoning is compared with the different orders recommended on various occasions in the *Mahābhārata* and the *Rāmāyaṇa*, it only shows that the arrangements were dictated by the circumstances, and there was nothing like a uniform law which was to be observed, though in theory it was there.⁵⁹ For

56 *Ibid.*, p. 98. Hellenic military art was just then becoming familiar with the use of elephants in warfare. Pyrrhus, the Epirot, made use of elephantry, in the next century, in his wars against the Romans who later learnt of its effective use from the Carthagenians.

57 Cp. *Ar. Śās.*, *Hastipradhāno Vijayarājyam*.

58 Ch. 242, 24 ff.

59 Hopkins, *op. cit.* p. 267, n.

instance, while in one place we are told that a chariot had ten elephants, and each elephant had in its turn ten horsemen; in another place it is said that each chariot had 100 elephants, and each elephant had 1,000 horsemen protecting it.⁶⁰ In actual practice, however, the Matsya army consisted of 8,000 chariots, 1,000 elephants, and 60,000 horse.⁶¹

The services of elephants in ancient wars were great. They marched in front of the army clearing the way of trees and shrubs. They protected the flanks of the army, helped the army to ford rivers, presented a firm front in fight, broke down the enemy phalanx, routed the enemy's army, rallied the soldiers of their side, and safeguarded the treasure.⁶² Generally the elephants formed the best decorations of a royal camp, and a monarch could achieve any amount of military success by means of his elephants alone.⁶³ On account of their importance in battle, only animals possessing distinct characteristics are recommended to kings for their stud. Some of these are said to be of the colour resembling a rainy cloud; some had a fund of physical strength, good height, attainment of speed with little or no use of the goad, a commanding appearance, combative propensity, and a power of enduring any amount of fatigue. It was only such noble animals that were kept in the royal stable chiefly for purposes of war. The elephant science, which went by the name of *gajaśikṣa* or *hasti śāstra*, was a special branch of study and formed

60 *Mhb.*, *Drona*, 60. 5-6; *Udyoga* 155.16.

61 *Virāt*, 33. 48.

62 *Agni Purāṇa*, 242. 23-4; *Kāma*. 20, 1-3; *Niti* 22.6.

63 *Niti*, 23.3.

‘ an important part of military discipline.’⁶⁴

According to *Śiva-Vyāsa Dhanurveda*,⁶⁵ whose date of composition is difficult to fix with the data available at present, the king who possessed good and trained elephants was sure to succeed in every engagement, as they effectively destroyed the entrenchments of the enemy’s camp, vigorously protected the flanks of their own army, pulled down towers in a fury, struck terror into the enemy’s heart, destroyed his phalanx, and cleared a passage even through the densest forest. Lastly, they were ready to sacrifice their own lives for their master’s benefit and hence there was nothing equal to an elephant corps. Here we cannot forbear giving a beautiful Jātaka story⁶⁶ which pays a tribute to the noble qualities of the animal. The Bodhisatta was the son of an elephant-trainer in the neighbourhood of Benares. He was appointed to train the State elephant of his own king. Once the king mounting on it led an attack on the city of Benares. The soldiers who offered defence from within the city gates discharged a shower of missiles against the enemy at which the elephant was frightened a little. The trainer addressed the elephant thus: ‘ Son, a hero like you is quite at home in the battle-field! In such a place it is disgraceful to turn tail.’

64 *Matsya Purāṇa*, ch. 215, 36. In this connexion we may refer to the two published works on this subject. One is *Hastyaśāstram* (Anandasrama, Poona) attributed to Pālakāpya and *Mātangalīla* (Trivandrum Sanskrit Series, No. 10) translated by Edgerton of Yale University—‘ The Elephant Lore of the Hindus ’.

65 Śārngadhara, 1572 and 1573.

66 Cowell ed. II, 182.

‘ Break through the iron bar, beat the pillars
down,
Crash through the gates, made fast for war and
enter the town.’

Recovering courage the elephant rushed towards the pillars of the gates with all his force and fury and broke them to pieces. Then he pulled down the gates and entered the city in victory and glee.

This Jātaka throws some light on the view sometimes held that there were no fire-weapons in ancient India. Certain Greek writers state that Indian elephants did not face the discharge of flaming missiles, and it has been argued from this that the animals shied thus, because they had not been used to fire-weapons of any kind, there having been none in India.⁶⁷ But the circumstances noticed by the Greek writers seem to be capable of a more reasonable explanation, viz., that these writers speak from their experience of merely exceptional occurrences in which the severity of attack on the animals was greater than could have been borne by elephants of any place whatsoever. Thus the elephant in the Jātaka wavered because the shower of missiles discharged at the animal was exceptionally heavy—not because any fiery arm was thrown at it.⁶⁸

As in the north, elephants formed an important army division of south Indian monarchs. It is said

67 McCrindle: *Alexander's Invasion*.

68 The use of burning naphtha balls thrown against onrushing elephants to frighten them and make them turn back on their own side, is mentioned by early Muhammadan historians as a feature of the warfare between the Rajputs and the Turkish invaders from the North-west (Elliot and Dowson, Vol. I.)

that the Cera king Śenguttuvan had a valuable force of elephants on whom he relied in great measure for his victories. It was on an elephant that he rode to the Ganges on whose banks he fought the northern Aryan monarchs.⁶⁹ That south India was particularly strong in the elephant corps of her army organisation can be seen from the great anxiety displayed by Malik Kafur to take all the animals he could get to his master at Delhi who set a high value on their possession. This was in the 14th century.⁷⁰

SECTION V

CAVALRY

The third division of the army common to both east and west was cavalry. We learn from the Kauṭaliya and Megasthenes that there was a well-organised and efficient cavalry force in the army of Candragupta. The cavalry as an organised force may be traced to the post-Vedic period but not earlier; for, though we have references to horses⁷¹ and war chariots drawn by horses,⁷² we have no indication that the cavalry as a disciplined force existed in the days of the *R̥g Veda*. This also explains to some extent why we have not a good number of horses among the Indus Valley finds recently unearthed. In the *Atharva Veda*, however, we hear of dust-raising horsemen.⁷³

69 Śūta. XXVI. 1. 57.

70 Vide The Khazainu'l-Futuh of Amir Khusrau (tr. & ed.) by Prof. M. Habib (1930).

71 RV. i. 22.6, 7-8; vi. 46, 13-14; etc.

72 Ibid., 1.3.1.

73 IV. 21.4.

In this connexion it is interesting to consider the oft-repeated statement that horses are non-Indian. It is not the whole truth. They were known to the Asuras of Vedic literature. There is a legend narrated in the third book of the *Hariharacaturanga* (though this is a work of the late 12th century A.D., the tradition recorded is very ancient). Once Brahmā performed a sacrifice out of which came a white horse with wings. It again came out as Uccaiśravas during the mythical churning of the milk ocean. Bali, the asura chief, took it for his use and with it as his riding animal he was able to achieve many impossible things. The Devas noticed the value of such a riding animal and appealed to the Creator for its possession. Out of the tears of the latter in the Dakṣayajña came forth horses which were divided into four castes and many other sub-castes. Dakṣa felt them to be a nuisance and cursed them to find their abode on the earth deprived of their wings. Thenceforward the horses became the riding animals of gods and men. These horses went to the Himalayan slopes where the hermitage of the sage Śālihotra was. The latter protected them as his own sons and presented them to gods like Indra, Agni, Varuṇa, as well as to kings on the earth. If there is any historical truth underlying this legend, it is that the Asuras were the first to know the use of horses and that the Devas learnt it afterwards.⁷⁴

But in the epoch of the epics and the *Arthaśāstra* we find that the cavalry occupied as important a place in the army as any other division. Kauṭalya mentions

⁷⁴ Cp. Nakula Aśvaśāstra, quoted in *Lakṣaṇaprakāśa*, pp. 407 ff.

a State superintendent of horses,⁷⁵ who had many duties to discharge besides maintaining a register of horses. The prescriptions of Kauṭalya relating to the duties of this officer are analogous to those of the superintendent of elephants, and only the more important of them from our point of view need be noticed here. Only experts in horse training and versed in healing the sick ones were chosen as *aśvādhyakṣa*.⁷⁶

Megasthenes⁷⁷ corroborates the evidence of the *Arthaśāstra*. There was a special department in the State for the cavalry. The horses of the State were provided with stables and placed under the care of good grooms and syces. There were several trained horsemen who could jump forward and arrest the speed of galloping horses. But the majority of them rode their horses with bit and bridle. When horses became ungovernable they were placed in the hands of professional trainers who made the animals gallop round in small circles. These professionals were experts in the management and control of horses. In selecting horses of war, their age, strength, and size were taken into account.⁷⁸ We may remark in passing that Abhimanyu's horses were only three years old.⁷⁹

75 अध्याध्यक्षः पण्यागारिकं क्रमोपागतमाहवलब्धमाजातं साहाय्यागतकंपण-
स्थितं यावत्कालिकं वाश्वपर्यग्रं कुलवयोवर्णचिह्नकर्मवर्गागमैल्लेखयेत् ।

Bk. II. 30.

76 *Ibid.*

77 Frag. 34 and 35.

78 The *Yuktikalpataru* distinguishes four kinds of horses. The classification is regional (p. 181). The inferior beasts are designated *nīca* and *kaniyāmsa*.

79 ततः संनोदयामास हयानाशु त्रिहायनान् । अतिदृष्टमनाः सूतो हेममाण्डपरि-

च्छदान् ॥

Mhb. Droṇa, 36.12.

Arrian says: 'The horsemen are equipped with two lances like the lances called Saunia and with a shorter buckler than that carried by the foot-soldiers. But they do not put saddle on their horses, nor do they curb them with bits like the bits in use among the Greeks or the Kelts but they fit on round the extremity of the horse's mouth a circular piece of stitched raw ox-hide studded with pricks of iron or brass pointing inwards, but very sharp.' There are also ivory pricks. The reins are connected with iron prongs in their mouths. It is practically this prong that keeps the animal in check. To this prong are connected the pricks, which have their own share in controlling these animals.⁸⁰

How important the science of horses was to the ancient Indians is best seen from the *Lakṣaṇaparakāśa* which quotes from several important old authorities some of which are probably lost to us. Among them are the *Aśvāyurveda* and *Aśvaśāstra*, the former attributed to Jayadeva and the latter to Nakula. As the traditional origin of the elephants is bound up with the name of the sage Sāmagāyana, so also the legendary account of the origin of horses is connected with another sage, Śālihotra. There is a treatise on horses entitled *Śālihotram*. It refers to the four castes of horses and numerous mixed horses.⁸¹ Another treatise on horses is *Aśvacikitsita* by Nakula. In the *Śukranītisāra*⁸² we get an elaborate list of the characteristics of a noble horse and of the various auspicious and inauspicious marks⁸³ on horses. The

80 See Arrian, XVI.

81 See *Lakṣaṇaparakāśa*, pp. 408 ff.

82 IV. 7. 42-72 and 75-110; *Yukti*, pp. 181-97.

83 It is said in the *Mahābhārata* that Nala was a master of horse-science which was imparted to Rṭuparṇa (*Ādi*. 75. 17-18).

colour of the horse⁸⁴ and its gait are also commented upon. Rules are given for the proper care of horses.

From the great attention paid to horses in the *Arthaśāstra* treatises there is every reason to think that these animals played a very important part in warfare. Both the Purāṇas and the epics agree that the horses of the Sindhu and Kamboja regions were of the finest breed, and that the services of the Kambojas as cavalry troopers were requisitioned in ancient wars. In the *Mahābhārata* war the Kambojans were enlisted. The steeds of Bāhlika were also highly esteemed.⁸⁵ Horses had names and so also had elephants.⁸⁶ Some of the finest horsemen who were experts in their art were Śalya, Karṇa and Kṛṣṇa.⁸⁷ Unlike the chariot horse, the cavalryman drove his animal with a whip which was generally fixed to the wrist. This allowed his hand free play. The cavalryman was armed with arrow or spear or sword. He wore breastplate and turban (uṣṇīṣa).⁸⁸ Worth noting is the fact that horses were made to drink wine before actually marching to battle.⁸⁹ The tactical use of the cavalry was to break through the obstacles on the way, to pursue the retreating enemy, to cover the flanks of the army, to effect speedy communication with the various parts of the army unobserved (bahutsara) and to pierce the enemy ranks from the front to the rear.⁹⁰ The cavalry was responsible, in a large measure,

84 *Droṇa*, 23. 73-74; *Bhīṣma*, 79. 51.

85 *Rāma. Bāla*, I. 6. 22. *Mhb. Sauptika*, 13.2.

86 See *Rāma. Bāla*, I. 6. 23-24.

87 *Mhb. Droṇa*, 31. 59-60.

88 *Mhb.*, *Karṇa*, 44. 64-7.

89 *Ibid.*, *Droṇa*, 112. 56.

90 *Kāma*, 20, 5-6; *Niti*. VI. 64-65; *Nitivākya* 22.8.

for the safety and security of the army in entrenched positions, forests or camps. It obstructed movements of supplies and reinforcements to the enemy. In short, the cavalry was indispensable in situations requiring quickness of movement.⁹¹

We shall conclude this section with the following hymn of the *Atharva Veda*.

‘Be thou, O steed, of wind swiftness, being harnessed; go in Indra’s impulse, with mind-quickness: let the all possessing Maruts harness thee: let Tvaṣṭar put quickness in thy feet.

‘The quickness, O courser, that is put in thee in secret, also that went about committed to the hawk, to the wind with that strength do thou, O steed, being strong, win the race, resuming in the conflict.’

SECTION VI

INFANTRY

The next important division of the army was the infantry, or foot-soldiers. Originally chariots and elephants were mostly used for warfare. By frequent intercourse with countries which produced the finest horses the cavalry took an all-important place. Lastly came the foot-soldiers and the notion came to be entertained more and more with the march of time that the more numerically strong the army, the greater were the

91 See Śankarārya’s comment on the *Kāmandaka* 20.5. Śīghra-kāryopapādanam, meaning vārtājñānādikārya sampādanam. This is especially useful in getting correct information, and delivering the same in the course of the operations of war (*Mhb. Bhīṣma*, 120.28).

possibilities of its success. The *Atharva Veda* refers to one of the battle rites when arming a warrior: 'I cover thy vitals with armour: let king Soma dress thee over with the immortal: let Varuṇa make for thee (room) wider than wide: after thee conquering let the gods revel.'⁹² One mode of equipment was with the ensigns.⁹³

The *Arthaśāstra* speaks of the infantry as a separate army department under the charge of a special officer of the State. This receives confirmation from Megasthenes' statement.⁹⁴ Besides the *maula* or hereditary troops which formed a considerable portion of the army, there were the *bhyta* or mercenaries, the *śreni* or soldiers supplied by the different group and guild organisations in the state, the *mitra* or soldiers supplied by allies, the *amitra* or deserters from the enemy ranks, and the *ātavi* or those recruited from forest tribes.⁹⁵ Professor Rapson says that these were probably marshalled, village by village, as in ancient Greece and Germany and as in Afghanistan at the present day. Though the military caste formed the bulk of the army, other castes were also admitted into it, under special circumstances. This classification formed probably a cross-division scheme, including cavalry men also. The value of a hereditary standing army and its loyalty to the king were well recognized.⁹⁶ The soldiers were given the necessary

92 Bk. VII. 118.

93 Bk. X. 1.

94 *Ar. Śās.* Bk. X. 5. पत्तिव्यूहः पुरस्तादावरणिनः पृष्ठतो धन्विन इति।
also Bk. IX. 2. Frg. 34.

95 *Ar. Śās.* Bk. IX. 2. मौलभृतकश्रेणीमित्रामित्राटवीबल ।

96 *Niti*, 22, 15. Cp. *Ar. Śās.* तद्वावमावित्वाभित्यसत्कारानुगमाच्च मौल-
बलं भृतबलाच्छ्रेयः Bk. IX. 2.

training required for actual operations in the field. They were instructed to fight from low ground or from eminences, to engage in open battle or diplomatic encounters, to fight from trenches and to fight both by day and by night. The *Nītiprakāśikā* gives a list of their duties.⁹⁷ They were to fix camps, supervise the work of free labourers engaged in military service, protect the treasury, arsenal, and other stores, and make arrangements for the formation of battle arrays. According to the *Sukranīti* and the *Kāmandakanītisāra*, the army was to be made as imposing as possible to frighten the enemy by its size. The *Sukranīti* also mentions that foot-soldiers possessed fire-arms when they fought.⁹⁸

When these foot-soldiers equipped themselves for war, Arrian says that 'they carry a bow made of equal length with the man who bears it. This they rest upon the ground and pressing against it with their left foot, thus discharge the arrow having drawn the string backwards: for the shaft they use is little short of being three yards long, and there is nothing which can resist an Indian Archer's shot—neither shield nor breast-plate, nor any stronger defence if such there be. In their left hand they carry bucklers made of undressed ox-hide which are not so broad as those who carry them but are about as long.'

97 शोधनं कूपतीर्थानां मार्गाणां शिबिरस्य च ।

स्कंधावारस्य करणं विष्टिकर्मप्रसाधनं ॥

कोशागारायुधागार धान्यागारादिरक्षणं ।

व्यूहप्राकारकरणं पत्तिकर्म प्रचक्षते ॥ VI. 66-7.

98 IV. 7.24. See Oppert *J.A.O.S.* 1888, P. 296 and also *C.H.I.* I, p. 271.

Another mode of equipping for war is also mentioned. Instead of bows some foot-soldiers were armed with javelins. But all wore swords with broad blades and less than three cubits in length. These were wielded with both hands in close fight to effect a mighty blow.⁹⁹ As if to demonstrate the superiority of disciplined infantry, the *Agnipurāṇa* says that victory ever attends the army where foot-soldiers are numerically strong.¹⁰⁰

The *Śukranīti*¹⁰¹ distinguishes the foot-soldiers by the term *svagama* from *anyāgama* applicable to the other three limbs of the *caturanga*. The field suitable to their operations was that which contained huge stones or trees and ant-hills. It was to be free from thorns, and should be even, and wide.¹⁰²

SECTION VII

THE COMMISSARIAT

The *caturanga* was a classical division of the army accepted by tradition. But in the epoch of the epics we hear of a *ṣaḍaṅga*¹⁰³ or the six-fold army, including

99 Arrian, XVI.

100 सेना पदातिबहुला शत्रून्जयति सर्वदा Ch. 228-7. See in this connexion the remarks of Irvine on the Moghul Infantry, p. 57. *The Army of Indian Moghuls*.

101 IV. 7. 3.

102 Cp. *Śānti* 100. 23-25.

103 This term *ṣaḍaṅga* connoted differently in different periods. The *Śukranītisāra* mentions seven elements of the army (IV. 7.1.), the usual fourfold division together with bulls, camels and cannon. The last may be appropriately termed as the artillery. Bulls and camels are mentioned in the description of the army by Kauṭalya; but by

commissariat and admiralty. The use of commissariat can be traced to the epic age. It is said that when the Pāṇḍava army marched to Kurukṣetra it was followed by 'carts and transport cars, and all descriptions of vehicles, the treasury, weapons, and machines, and physicians and surgeons, along with the few invalids that there were in the army and all those that were weak and powerless.' This was a purely civil department attached to the army.¹⁰⁴ That a group of physicians

themselves they did not constitute two separate divisions as mentioned by Śukra who probably lived in the early centuries of the Christian era. The attempt to show that the Vijayanagar army consisted of the divisions mentioned by Śukra with the exception of chariots on the single evidence of the Bakhar of Rāmarāja cannot be definitely accepted as we are told by Sewell that the troops of Vijayanagara which marched against the Sultan of Gulbarga in A.D. 1419 consisted of horse, foot and elephants. (Saletore, *Social and Political Life*, I, pp. 420-21 and Sewell, *Forgotten Empire*, p. 65). We have to treat this evidence with caution. It seems more likely that bulls and camels continued to be auxiliaries of the cavalry and elephants. This larger use of camels and bulls was necessitated by the lack of supply of good horses. We are told that the foreign policy pursued by Vijayanagar was to get a good supply of horses from Armuz (Sewell, *op. cit.*, pp. 381-2). It may also be noticed that the price of a horse was very heavy (Barbosa, I, p. 211). As for the artillery it is difficult to agree with the view often glibly expressed that it was unknown to the age of the *Arthaśāstra* (Saletore, *op. cit.* p. 420). In the epic and *Arthaśāstra* period artillery included mostly chariots and sometimes infantry who used fire arms against the enemy.

104 शकटापणवेशाश्च यानयुगं च सर्वशः ।

कोशं यन्त्रायुधं चैव ये च वैद्याश्चिकित्सकाः ॥

फाण्डु यन्त्रबलं किञ्चिद्यन्त्रापि कृशदुर्बलम् ।

तत्सङ्ग्रहययौ राजा ये चापि परिचारकाः ॥ *Mhb. Udyoga*, 151, 58-59.

formed part of the army on the march is again attested by another reference to them in the next chapter. They had with them the necessary medicines and other equipment. In describing the camp of the Pāṇḍavas we are told that skilled and experienced workmen were found in great numbers in the army and that these were given regular salaries. In it were seen all kinds of weapons, besides plenty of water, food and fodder, chaff and fire. Other articles were honey, clarified butter, and pounded lac.¹⁰⁵

In another chapter of the same parvan,¹⁰⁶ in the course of a description of Duryodhana's army, we are told that it went forth furnished with all the requirements of a large army. Some of these were materials for repair of chariots, tiger skins to cover the chariots, spare spear-blades and sticks, spare quivers, diverse suites of ropes, oil, molasses and sand, pots of poisonous snakes, inflammable articles, syringes, water, skins of leopards, oil-cloths, clarified butter and other weapons of war.¹⁰⁷

The chief functions of this department were to

105 तत्रासन्शिल्पिनः प्राज्ञाः शतशो दत्तवेतनाः ।

सर्वोपकरणैर्युक्ता वैद्याः शास्त्रविशारदाः ॥

ज्याधनुर्वर्मशस्त्राणां तथैव मधुसर्पिषोः ।

ससर्ज रसपांसूनां राशयः पर्वतोपमाः ॥

बह्वदकं सुयवसं तुषाङ्गारसमन्वितम् ।

शिविरे शिविरे राजा सञ्चकार युधिष्ठिरः ॥ *Ibid.*, 152, 12-14.

106 Ch. 155. Compare the organisation of the Byzantine army of the ninth and tenth centuries A.D. as furnished by Charles Oman in *A History of the Art of War in Middle Ages* (1905), pp. 189 ff.

107 St. 3 ff.

supply clothes and arms to those who had lost them. Wounded soldiers were sent to the camp to be treated by the physicians and surgeons. The same care was taken of the wounded animals. Thus the healing of man and beast was another function of this department.

According to Megasthenes,¹⁰⁸ Candragupta's army was controlled by a body consisting of six divisions with five members each. One such division was the Commissariat. This was to co-operate with the superintendent of bullock-trains used for transporting war material, food-supplies for the soldiers, provender for the cattle, and other military requisities. Under the control of this division were servants who beat the drums or carried gongs, grooms for the horses, mechanics and their assistants, and foragers; to this list must be added physicians, astrologers, etc. mentioned in the *Arthaśūtra*.¹⁰⁹

The *Nītiprakāśikā*¹¹⁰ says that the army was generally followed by a select harem, some friendly neighbours, a few suburban inhabitants, financiers, chamberlains, eunuchs, the sick, wounded, maimed and weak; also by the civil officials of the State, by workmen, diggers, carpenters, surveyors, engineers, men acquainted with the field of action, hunters acquainted with forests, and good physicians.

The numerous references in our authorities to the Commissariat demonstrate beyond doubt that wars were

108 Fg. 34.

109 चिकित्सकाः शस्त्रयन्त्रागदस्नेहवस्त्रहस्ताः स्त्रियश्चान्नपानरक्षिण्यः पुरुषाणा-
मुद्धर्षणीयाः पृष्ठतः तिष्ठेयुः ॥ Bk. X. 3.

110 VI. 19, 22, 34 ff.

planned methodically and conducted systematically. The importance of the Commissariat to the army was fully recognised from at least the epic period and certainly in the Mauryan epoch. To cut off supplies from the opponents became an accepted method of strategy. The services of the Commissariat were especially valuable when fortresses were besieged and siege operations were protracted. But the persistence of the camp-following was an element that contributed to the weakness of the army in the long run. This was specially seen in the Mughal army system, especially that of Aurangzeb. It is said that Sivaji took advantage of this vulnerable point.¹¹¹

SECTION VIII

THE ADMIRALTY

Dr. V. A. Smith says that 'the creation of the Admiralty department was an innovation due to the genius of Candragupta'.¹¹² The Admiralty as a department of the State may have been a creation of Candragupta but there is evidence to show that the use of ships and boats was known to the people of the *R̥g Veda*.¹¹³ In the following passage we have reference to a vessel with a hundred oars: 'This exploit you achieved, Ásvins in the ocean, where there is nothing to give support, nothing to rest upon, nothing to cling to, that you brought Bhujya, sailing in a hundred-oared ship, to his father's house.'¹¹⁴

111 See S. N. Sen: *The Military System of the Marathas*.

112 *Early History of India*, p. 133.

113 I, 17.1.5.

114 Wilson's Trn.

Further on in the Veda, this same vessel is described as a *plava*¹¹⁵ which was storm-proof and which presented a pleasing appearance and had wings on its sides. Another reference¹¹⁶ informs us that Tugra dispatched a fleet of four vessels (Catasro nāvah) among which was the one referred to above. We may infer from these passages that the Aśvins were a great commercial people having their home in a far-off island, and that their ruler Tugra maintained a fleet in the interests of his State. There are also other references in the *R̥g Veda* to show that the ancient Indians were acquainted with the art of navigation. For instance, Varuṇa is credited with a knowledge of the ocean routes along which vessels sailed.¹¹⁷

The *Baudhāyana Dharmaśāstra* speaks of Samudra-samyānam and interprets it as *nāvā dvīpāntarāgamanam*, i.e., sailing to other lands by ships. This very term occurs in the *nāvādhyakṣa* section of the *Kauṭaliya Arthaśāstra*.¹¹⁸

The *Purāṇas* have several references to the use of ships and boats. The *Mārkaṇḍeya Purāṇa* speaks of vessels tossing about on the sea. The *Varāhapurāṇa* refers to the people who sailed far into the ocean in search of pearls and oysters. The ships floated daily on the shoreless, deep, and fearful waters of the ocean.¹¹⁹ We are on a firm ground when we see in the Andhra

115 I, 24, 3, 5.

116 *Ibid.*, 6.

117 I, 6,2,7. Cp. *Tait Up.*, *Durgā Sūktam* जातवेदसे सुनुवाम ।

118 Bk. II. ch. 28.

119 Quoted in the *Yuktikalpāraṇa*, p. 228.

चिरप्रवासयात्रायां रणे काले घनात्यये ।

period their coins marked with ships. The ship building activities were great on the east coast, and the Coromandel coast in particular. From this period to about 15th century A.D. there was a regular intercourse with the islands of the Archipelago most of which were colonised and also with ancient America right across the Pacific as testified to us by the archaeological finds and inscriptions in those parts. The Pāli books of Ceylon like the Mahāvamsa refer to ocean going vessels carrying 700 passengers. Such frequent intercourse and colonisation through the ages could not have been effected without a powerful fleet.

But it is in a later work, the *Yuktikalpataru* of Bhoja, that we have three classes of ships—the Sarvamandira, the Madhyamandira, and the Agramandira. The first was called Sarvamandira because it had apartments all round. In the Sarvamandira were carried treasures, animals, and ladies of the harem. This was the vessel ordinarily used by kings in times of peace. The Madhyamandira was so called because the living apartments were situated in the middle. It was a sporting vessel and generally used in the rainy season. The vessel of the third kind, the Agramandira, took its name from the circumstance that the living room was located in front or at the top of the vessel. The Agramandira was used for distant and perilous voyages and also sea-fights.¹²⁰ There are also in the *Yuktikalpataru* other references to vessels. There are 27 types of ships mentioned here, the largest having the measurement 276 ft. × 36 ft. × 27 ft. weighing roughly

120 P. 228; see also R. K. Mookerjee: *Shipping in Ancient India*.

2,300 tons. The following passage points to the use of ships in warfare. The line: *naukādyam vipadam jñeyam*¹²¹ makes it clear that naval expeditions were common. Under the heading of *yānam* or march mention is made of expeditions by land, water and air. We shall examine these later on in detail.

From this we may conclude that in ancient India ships were employed in warfare at least as early as the *R̥g Vedic* times, though only on a scale which would appear insignificant to-day what with U-boats and submarines. But it is an incontrovertible fact that there was a naval department in Mauryan times. We have the testimony of Megasthenes that the navy was under a special officer called the Superintendent of Navigation. This official was in turn controlled by the Admiralty department. The officer whom Megasthenes refers to as Superintendent of Navigation is called *Nāvūdhyaḥśa* as already seen, in the *Arthaśāstra*. The Greek accounts bear testimony to the fact that navigation had attained a very high development at the time of Alexander's invasion, for we are told that the invader was able to secure a fleet from the Punjab at short notice. The *Arthaśāstra* lays down some healthy regulations relating to navigation. Vessels which gave trouble or were bound for the enemy's country, or transgressed the regulations of port towns were to be destroyed.¹²²

A considerable ship building activity is evident on the west coast of India also as noted in the Śāṅgam works of the Tamils. South India carried on political

121 P. 7.

122 हिंसिका निर्घातयेद्, अमित्रविषयातिगाः पण्यपत्तनचारित्रोपघातिकाश्च ।

and commercial activities as far as the Mediterranean in the early centuries of the Christian era and before. The great Ceran Śenguttuvan had a fleet under him.

Coming to later times we have the account of Huen Tsang who notices a fleet of 30,000 sail belonging to the King of Assam. There is inscriptional evidence of the possession of a fleet under the Kākatiyas and the Cholas in South India. Marco Polo testifies to the huge size and efficient construction of Indian vessels while Yule in his *Cathay* refers to Rajput ships *en route* to China. Friar Odoric saw one with 700 passengers. Varthema (1503 A.D.) saw vessels of 1,000 tons burden built at Masulipatam. According to Dr. Vincent, India built great sized vessels from the time of Agathareids (171 B.C.) to the 16th century. And no wonder the Portuguese when they first landed at the west coast were carried away by the excellent India vessels. Later still, the Vijayanagara Empire, which had as many as 300 ports,¹²³ had a powerful fleet. The naval commander was styled *Naviyādaprabhu*.¹²⁴ More of this in the section on naval warfare.

SECTION IX

CHARACTERISTICS OF A GOOD ARMY

Professors Macdonell and Keith remark that in the Vedic period 'in war the Vaiśya must have formed the bulk of the force under the Kṣatriya leaders. But like the Homeric commoners, the Vaiśyas may well have done little of the serious fighting, being probably ill provided

123 Elliot and Dawson, IV. p. 103.

124 *Ep. Car.* VIII, Sb. 468.

with either body armour or offensive weapons.’¹²⁵ They further disagree with Zimmer who advances an untenable theory, from the terms *Śardha*, *Vrāta* and *Gaṇa*, that the Vedic host fought according to clan (*viś*), village (*grāma*) and family¹²⁶ (Altin. Leben, 162). The epic host satisfied the requirements which were prescribed by the *Arthaśāstra*. Here the army was composed of the hereditary troops (*maula*), hired troops (*bhr̥ta*), soldiers belonging to the corporations (*śreṇi*), troops of allies, of enemy and of wild tribes.¹²⁷ Kautālya enters into a discussion on the relative merits of the army composed of these troops. A body of soldiers who are of the same country, caste, and training is a great asset. Later on he says that the best army is one recruited from hereditary troops well disciplined and loyal. Next come the hired soldiers who are considered better than the *śreṇi* warriors provided they were easily accessible and obedient. But the *śreṇi* warriors are deemed superior to those of an ally if they are of the locality and share the feelings of their master. The volunteers of an ally are better than those coming from an enemy country. Even here the army of an enemy led by an Arya is better than that of foresters. The last two are to be treated with caution and something like a serpent. These constituted the *ṣaḍangabala* of a king and must not be confounded with the *ṣaḍanga* or the sixfold force. A State may possess all these six kinds of troops at one and the same time and employ them to advantage. The discussion on the relative merits of these different forces

125 *Vedic Index*, ii, p. 334.

126 *R.V.V.* 53.11.

127 *Bk. IX*, 11.

should not be understood to imply that only one kind of troops was employed at one and the same time.¹²⁸

The *Sukranīti* further describes the characteristics of a good army. Here a distinction is made between the standing army and the newly recruited army, the trained army and the untrained army, the efficient army and the inefficient army (*sāra* and *asāra*). In short this political treatise envisages two kinds of recruitment—*gulmībhūta* answering to the standing army, and *agulmaka* corresponding to the mercenary troops,¹²⁹ though it is not altogether unfamiliar to the other *balas* with the exception of *śrenibala* mentioned in the

128 See also *Kāma*. 18. 2. 25 f; *Manu*, VII, 185.

129 सेनाबलं तु द्विविधं स्वीयं मैत्रं च तद्विधा ।
 मौलसाद्यस्कभेदाभ्यां सारासारं पुनर्द्विधा ॥
 अशिक्षितं शिक्षितं च गुल्मीभूतमगुल्मकं ।
 दत्तास्त्रादि स्वशस्त्रास्त्रं स्ववाहि दत्तवाहनम् ॥
 सौजन्यात् साधकं मैत्रं स्वीयं भृत्या प्रपालितं ।
 मौलं बह्वन्दानुबन्धि साद्यस्कं यत् तदन्यथा ॥
 सुयुद्धकामुकं सारमसारं विपरीतकं ।
 शिक्षितं व्यूहकुशलं विपरीतमशिक्षितं ॥
 गुल्मोभूतं साधिकारि स्वस्वामिकमगुल्मकं ।
 दत्तास्त्रादि स्वामिना यत् स्वशस्त्रास्त्रमतोऽन्यथा ॥
 कृतगुल्मं स्वयंगुल्मं तद्वच्च दत्तवाहनं ।
 आरण्यकं किरातादि यत् स्वाधीनं स्वतेजसा ॥
 उत्सृष्टं रिपुणा वापि भृत्यवर्गे निवेशितं ।
 भेदाधीनं कृतं शत्रोस्सैन्यं शत्रुबलं स्मृतं ।
 उभयं दुर्बलं प्रोक्तं केवलं साधकं न तत् ॥ IV. 7. 9-15.

Kauṭaliya. This indicates that the śreṇis must have died out as political entities by the time the *Śukranīti* was composed.

In the opinion of the *Kauṭaliya*¹³⁰ that was the best army which was composed purely of Kṣatriyas, of noble birth, strong-bodied and well-disciplined, with a contented home, ready to march over the roughest tracts and for a considerable length of time, valorous, accustomed to varieties of climate, and hence inured to privations and fatigue, well trained in all arts and modes of warfare, and also in the handling and application of weapons, and which never loses its sense of obedience and loyalty to the King. Further, it is said that a standing army recruited from the warrior caste, even though disobedient, is infinitely superior to a force recruited from different classes of people, for the former can be easily conciliated and brought round.¹³¹ Kauṭalya has no confidence in an army composed of Brahmans or even Vaiśyas or Śūdras.¹³²

This raises the question whether soldiers were drawn also from the Brahman caste. There is no evidence anywhere that the State itself enlisted these people. But if members of this caste volunteered their services, no doubt, they were admitted to the ranks. The army of Brahmans, says the *Arthaśāstra*, could be won by means of supplication (praṇipāta). That of the

130 Bk. IX, 2.

131 *Ar. Śās.* Bk. VI. 1. This is in agreement with the view of Clauswitz who says that military virtue is a quality of standing armies only (Vol. I, p. 183).

132 *Ar. Śās.* Bk. IX. 2; Śānti, 101, where the chief characteristics of the warriors of the different countries are given. The South Indians are said to be experts in sword warfare.

Vaiśyas and Śūdras numerically strong is better than any of Brahmins or untrained Kṣatriya hosts. There is evidence that Brahmins enjoyed the high position of a general or a commander. In the epoch of the imperial Guptas, Kumārāmātya Prthivīśena who was at first a member of the council of Kumāragupta was later on appointed his Commander-in-chief (Mahābalādhikṛta) [*Ep. Ind.* X. pp. 71-2]. In the Epic we find Droṇa, Aśvatthāma and Kṛpa as commanders. To the Pallava Narasimhavarman I (Mahāmalla) the Brahmin Śīrutoṇḍar otherwise known as Parañjoti was the commander-in-chief, who won a victory over Pulakeśin II in 642 A.D. and captured its capital Vātāpi.¹³³ There is inscriptional evidence of the time of the Choḷas of a Brahmin military officer named Kṛṣṇan Rāman¹³⁴ under Rājārāja the Great. When we come to the epoch of the Vijayanagara supremacy, we have the evidence of Kṛṣṇadevarāya's *Āmuktamālyāda* (canto V, 255, 262) that Brahmins were enlisted more and more for military service. They were placed in charge of fortresses and were appointed to lead armies. It is said that the king would sleep in peace if Brahmins were in charge of fortresses and of well-equipped forces.^{134a} This speaks highly of the loyalty and confidence reposed in them by ruling monarchs. An inscription at Tirukkāḍaiyūr in Tanjore District dated 1521-22 of Kṛṣṇarāya shows that leaders of contingents were Brahmins. A record No. 47 of 1906 mentions the name of a Brahmin Āpatsahāyan

133 R. Gopalan, *History of the Pallavas of Kanchi*, p. 98.

134 *S.I.I.*, II, Pt. V. p. 13.

134a See also Professor K. V. Rangaswami Ayyangar's paper in *Sir C. R. Reddi Commemoration Volume*.

as taking part in wars of the period. Even in comparatively late times, we find Brahman Generals in command of armies of their kings, e.g., Rama Iyen Dalavai, the great co-adjutor of Mārtāṇḍa Varma, the maker of modern Travancore.

Did the Brahman lose his social pre-eminence by taking to the profession of arms? According to the *Baudhāyana Dharmasūtra*, a member of the Brahman caste unable to keep his body and soul together by following his hereditary occupation may take up the profession of arms without prejudice to his svadharma. This receives confirmation from the *Mahābhārata*. Some scholars are of opinion that Gautama does not countenance this rule, but the fact is that, in Gautama's opinion, a Brahmana would not be a valuable acquisition to the army, as he is unused to the horrors of war.

It will thus be seen that the Kṣatriyas formed the rank and file of an army, but that in exceptional times, as during great and sudden calamities, members of other castes were also recruited. The inference is that the recruits from other castes generally reverted to their old occupations as soon as circumstances permitted.

We have documentary evidence of the highest value in the inscriptions of the Great Cholas to show how an army was organised in the tenth century A.D. in South India. As many as thirty-one regiments are mentioned in the Tanjore inscriptions.¹³⁵ Most of these regiments have been called after the surnames or titles of the reigning king or his son:—

135 *S.I.I.*, ii, pt. I, pp. 9 and 10.

1. Perundanattu Ānaiyāṭkal (elephant corps).
2. Paṇḍita Śora-Terinda-Vilḷigal (bowmen).
3. Uttama Śora-Terinda-Andalagattālār.
4. Nigarili Śora-Terinda-Udanilai Kudiraichchevagar (horsemen).
5. Mummaḍi Śora-Terinda-Ānaippāgar (mahouts).
6. Vīra Śora-Aṇukkar.
7. Parāntaka Kongavālār.
- 8-9. Mummaḍi Śora, and Keralāntaka Terinda Parivārattār (servants).
10. Mūlaparivāra Viṭṭeru (standing army).
11. Singalāntaka Terinda Parivārattār (servants).
12. Śirudanattu Vaḍugakkālavar.
13. Valangai-Parambaḍaigalilār.
- 14-27. Perumdanattu, Śirudanattu, Aragiya-śora-terinda, Aridurgalanghana, Chaṇḍaparākrama Terinda, Ilaiya Rājarāja Terinda, Kṣatriya Śikhāmani Terinda, Rāja-Nittavinoda Terinda, Rājakaṇṭhīrava Mūrtavikramābharaṇa, Rāja Terinda, Rājavinoda Terinda, Raṇamukha Bhūma Terinda, Vikramābharaṇa Terinda-Valangai Velaikkārar. It is not easy to exactly identify these Velakkāra troops. These were largely drawn from the Right Hand classes. It is significant that the Left Hand classes do not figure among the regiments which from the extensive nature, seem to be a people's army. However that may be what interests us is the term Velakkārar. They were probably a volunteer corps as has been

suggested, raised temporarily for a certain contingency. What is more interesting is that the Velakkāra troops are mentioned in the Mahāvamsa and in the service of King Vijayabāhu (A.D. 1065-1120). Here they were mercenaries raised with a definite object viz. for an expedition against the Chōḷa country. In the light of this are we tempted to identify the Velakkārar of Rājarājadeva as mercenaries. There is however no evidence of Rājarāja raising mercenary troops. His troops were all regular soldiers. We therefore agree with the suggestion that originally regular troops, these Velakkārar, eventually developed into mercenaries (See S.I.I. II. p. 10). All were recruited from the Right Hand classes of the kingdom.

28-29. Keralāntaka vāsal, and Aṇukka vāsal Tirumeykāppar (body-guards).

30. Parivāra Meykāppargal.

31. Palavagai Parampaḍaigalilār.

Some of these regiments were entrusted with duties other than military, for example, temple-building and temple musicians. It is curious to note that all the eighteen musicians of the temple were recruited from these regiments. And twelve of them were from the Velakkāra troops. Here is an indication that under the Chōḷa regime the military helped in the great public works of the State, even as the army departments and engineers have been requisitioned in the days of East India Company for the construction of roads, canals and railways.

SECTION X

UNITS OF THE ARMY

The Hindu army was divided into Patti, Senāmukha, Gulma, Gaṇa, Vāhinī, Pṛtanā, Camu, Anikinī, and Akṣauhiṇī. These divisions roughly correspond to our modern battalions, regiments, companies, etc. Of these the *patti* meant one chariot, one elephant, three horses and three footmen. This was the smallest unit of the army. The next was *senāmukha*, the four arms of the *patti* multiplied by three. In this way three *senāmukhas* formed a *gulma*,¹³⁶ three *gulmas* one *gaṇa*, three *gaṇas* one *vāhinī*, three *vāhinīs* one *pṛtanā*, three *pṛtanās* one *camu*, three *camus* one *anikinī* and ten *anikinīs* formed one *akṣauhiṇī*. An *akṣauhiṇī* consisted of 21,870 chariots, 21,870 elephants, 65,610 horses and 1,09,350 foot-soldiers.¹³⁷

In the Udyoga parva of the *Mahābhārata* there is a different enumeration of the army units. Mention is made of *senā*, *pṛtanā* and *vāhinī*. *Senā* is a unit constituting 500 chariots, 500 elephants, 1,500 horses, and 2,500 foot-men. Ten *senās* constituted a *pṛtanā* and ten *pṛtanās* one *vāhiṇī*.¹³⁸ The *Mahābhārata* recounts that the two armies of the Pāṇḍavas and Kauravas on the field of Kurukṣetra consisted of eighteen Akṣauhiṇīs of which eleven belonged to the Kauravas and only seven to the Pāṇḍavas.¹³⁹ In another place it is said that a *patti* totalled 250 men. Thrice

136 See Manu's interpretation of Gulma, VII, 190.

137 See Amarakośa; II. 536-7. There was then the Mahākṣauhiṇī (*Śiva. T. R. V.*, 14.47-63).

138 *Udyoga* 155. 22-24.

139 *Ibid.*, 27.

in number to this was *senāmukha*, and thrice this number constituted *gulma*. Three *gulmas* made up a *gaṇa*.¹⁴⁰ If we consider dispassionately the numerical strength of the various forces in the epics, the figures given strike us as highly incredible. The arbitrary reckoning of the different units by the multiples of three is so mechanical that it is on the face of it unacceptable. In order to increase the magnitude of the war, the poet has enumerated exaggerated figures. It must be admitted, however, that there was a system, a method and a plan in the organisation of the ancient Hindus, and to this extent they deserve commendation.¹⁴¹

140 *Ibid.*, 28-29.

141 In this connexion see S. N. Sen, *Military Organisation of the Marathas*.

CHAPTER V

DEPARTMENTS OF THE ARMY

SECTION I

WAR COUNCIL

IN war, as in all other important affairs of state, the ancient Hindu king sought and followed the advice of his ministers. They in their turn employed secret agents, and managed to keep themselves informed of all the events and circumstances of which they had to take account in tendering their counsel.¹ It is remarkable that this was followed up to the twelfth century A.D., as is testified by the *Raṇadīpikā* written for a Kerala king.² There is, therefore, justification for the remark that the ancient South Indian kings, who had their own laws of war (as is evident from the Śāṅgam works of Tamil literature), slowly but surely adopted the laws prescribed in early Sanskrit writings. Unaided, it is said, even a skilled monarch gets into difficulties. The aid here referred to is that afforded by ministers.³ Consultation must be held with not more than three, and the king was to act on the unanimous decision of these

1 Śānti, 83. 51-3.

2 *Trivandrum Sanskrit Series*, 1928.

3 परीक्षितसहायस्य तिष्ठन्तीह युधिष्ठिर ।

सहाययुक्तेन मही कृत्वा शक्या प्रशंसितुम् ॥ Śānti. 112. 19-20.

three members of the War Council. The chief thing deliberated upon was the examination of one's resources as compared with the resources of the enemy.⁴ The examination of this particular topic is entitled *naya-viveka*, and the policy to be pursued must be rooted in *nīti*. Or else even a strong king suffers disgrace at the hands of a weakling like an elephant stuck in the mud by fish.⁵

Bhīṣma tells Yudhiṣṭhira on the authority of the first law-giver, that victory depends on deliberation and intelligence.⁶ It is an ancient dictum that the king who is guided by sagacious councillors attains great success in his undertakings. Again, in the conversation between Indra and Br̥haspati, the latter says that only after deliberating with his ministers on the policy to be pursued must the king decide whether to fight or to submit. It is better to consult only one minister lest the secret should be divulged, but on special occasions more may also be consulted. Unanimity on the part of the councillors is to be desired.⁷ Rāvaṇa discourses on

4 Ch. 1, 21-29. The rules laid down here are only a replica of the rules prescribed in the old law books.

5 अनीतिज्ञः समर्थोपि रिपुणा परिभूयते ।

गजोऽपि चाम्बुधौ ममो महामत्स्यैर्यथा तथा ॥ 1.5.

6 वर्तस्व बुद्धिमूलं तु विजयं मनुरब्रवीत् ।

बुद्धिश्रेष्ठानि कर्माणि बाहुमध्यानि भारत ॥

तानि जङ्घाजघन्यानि भारप्रत्यवराणि च ।

राज्यं तिष्ठति दक्षस्य संगृहीतेन्द्रियस्य च ॥ Śānti, 112, 17-9.

7 Śānti, 83. The whole chapter is on mantrī and mantra.

consultation thus:⁸ 'Success depends on proper deliberation. He is alone the superior king who consults wise men before deciding on war. Counsels are of three kinds: firstly, those in which the decision of all the councillors is unanimous at the outset; secondly, those in which an agreement is reached after a lengthy and protracted debate; thirdly, those in which decision is arrived at by mere majority.' He followed these

8 *Yuddha*, ch. vi. 5-15.

मन्त्रमूलं हि विजयं प्राहुरार्या मनस्विनः ।

तस्माद्वै रोचये मन्त्रं रामं प्रति महाबलाः ॥

त्रिविधाः पुरुषाः लोके उत्तमाधममध्यमाः ।

तेषां तु समवेतानां गुणदोषौ वदाम्यहम् ।

मन्त्रिभिर्हितसंयुक्तैः समर्थैर्मन्त्रनिर्णये । मित्रैर्वापि समानार्थैर्बान्धवैरपि बाहितैः ॥

सहितो मन्त्रयित्वायः कर्मरम्भान्प्रवर्तयेत् । दैवे च कुरुते यत्नं तमाहुः पुरुषोत्तमम् ॥

एकोऽर्थं विमृशेदेको धर्मं प्रकुरुते मनः । एकः कार्याणि कुरुते तमाहुर्मध्यमं नरं ॥

गुणदोषावनिश्चित्य त्यक्त्वा धर्मव्यपाश्रयं । करिष्यामीति यः कार्यमुपेक्षेत्
नराधमः ॥

यथेमे पुरुषा नित्यमुत्तमाधममध्यमाः । एवं मन्त्रा हि विज्ञेया उत्तमाधममध्यमाः ॥

ऐकमत्यमुपागम्य शास्त्रदृष्टेन चक्षुषा । मन्त्रिणो यत्र निरस्तास्तमाहुर्मत्तमुत्तमम् ॥

बह्वीरपि मतोर्गत्वा मन्त्रिणामर्थनिर्णये ।

पुनः यत्रैकतां प्राप्तः स मन्त्रो मध्यमः स्मृतः ॥

अन्योन्यं मतिमास्थाय यत्र संप्रतिभाष्यते ।

न चैकमत्ये श्रेयोऽस्ति मन्त्रः सोऽधम उच्यते ॥

तस्मात्सुमन्त्रितं साधु भवन्तो मतिसत्तमाः ।

कार्यं संप्रतिपद्यन्तामेतत्कृत्यं मतं मम ॥

principles and held counsel with his advisers before embarking on war.⁹

Kāmandaka says that the king should consult wise and loyal men versed in military science and grown grey in experience. According to him¹⁰ the power of deliberation and ministerial advice is decidedly superior to that of mere brute force. He shows how Brhaspati by his wisdom overcame the Asuras. We know from the Purāṇas how Śukrācārya, the leader of the Asuras, undertook a severe penance to get at the knowledge of *mṛtasañjīvanī vidyā* or the mantra for restoring to life persons who had died in the field of battle, seeing the slaughter of numerous Asuras by the Devas. The penance over, Śukra returned to his residence but was not accepted by his followers. For in the meantime Brhaspati put on the disguise of Śukrācārya and placing the Asuras under a spell of mystification made them accept him as the true Śukra, while the real Śukra was made out to be merely one in the disguise of their ācārya. In this way he overcame the Asuras.¹¹ Kāmandaka further enjoins that the king should consult his council of ministers whenever envoys were sent out to foreign States. The *Harivaṃśa* relates that Jarāsandha, contrary to his own plan, adopted the suggestion of the king of Cedi, a prominent member of the former's military council.

Did the king always follow the counsel of his ministers and councillors? It is difficult to answer this question; but it may be confidently said that the king

9 *Ibid.*, ch. 13.

10 *Kāma.* 12.7. 13, 1-2. See also *Brahmaṇḍapurāṇa*, IV, 21.50. where the term *vicāra* is mentioned for this.

11 *Matsya Purāṇa.* 47. 181-205.

generally followed the advice of his councillors, and it was more or less his duty to do so. There were of course kings who broke this convention and did as their will dictated. It would be sufficient to give one example in support of this statement. Duryodhana's War Council included such wise men as Vyāsa and Maitreya.¹² These councillors advised Duryodhana to make peace with the Pāṇḍavas, as in their opinion the Pāṇḍavas would ultimately win, but he turned a deaf ear to their words. From this it would appear that the Council was merely an advisory body. Its resolution was not binding on the king.

That such war councils were also held in the battle-field either on the eve of the battle or during the course of operations is seen from the *Harivaṃśa*.¹³ When Balarāma and Kṛṣṇa were wandering on the mountains of Gomanta, Jarāsandha who arrived at its foot held a council to devise steps how best to encounter them. In Jarāsandha's opinion, the Generals were to ascend the mountain fortress and confront the enemy on all sides. But the king of Cedi, a prominent member of his war staff, spoke on the futility of such endeavours. He advised them to set fire to the fortress and thus bring the enemy to his knees. This was accepted as a wise policy by all including the king. A huge conflagration was the result, though it did not ultimately lead to the subjugation of the enemy. In the war between Lalitā and the Asura Bhaṇḍa, war councils were summoned on both sides.¹⁴ In the epoch of the Mauryas the King-

12 Ch. 98.

13 Ch. 98.

14 See *Br. Purāṇa*, IV. Ch. 21.

in-council acted as a war cabinet and appointed secret informants to study the movements of the enemy kings and report the same to the Head-quarters.¹⁵ It has to be assumed that the war council was a feature of the Gupta polity considering the nature and value of wars into which the Gupta emperors plunged themselves. The term *mantrin* in the Gupta inscriptions as distinct from the *Amātyas* may suggest that the *mantrin* was a member of the war council.

Coming to South India, in the Vijayanagar period, we have the primary evidence of foreign travellers like Barbosa and Nuniz who testify to the existence of a war council, which the king consulted before undertaking an expedition. Barbosa refers to a decision of one such council (p. 224). Nuniz mentions the council which Kṛṣṇarāya consulted before his march against the Sultan of Bijapur.¹⁶ According to Sewell, however, there was no separate war council, apart from the ministers.¹⁷

SECTION II

WAR FINANCE

The special importance of finance in war was recognized even as early as the *R̥g Veda*, in a hymn in which Indra is prayed to for the gift of wealth for maintaining an army. In the *Mahābhārata* and other treatises of later times, much attention is paid to military finance.

15 *Hindu Administrative Institutions*, p. 287.

16 *A Forgotten Empire*, p. 72 and pp. 324-5.

17 For further details, see T. V. Mahalingam's *Society and Administration under Vijayanagar*, ch. v.

Among the important heads of military expenditure in ancient India were the salaries of the soldiers, officers, and diplomatic agents; the construction and repair of fortifications; and the purchase of military requisites. Considerable sums must have been spent as bribes for securing information, fomenting troubles in the enemy territory, and other objects.

If we turn to the pages of the *Arthaśāstra* of Kauṭalya and also to the records of Greek travellers, we find the Mauryan public finance anticipated much of the modern principles regulating revenues and expenditure. What Shirras gives in his *Science of Public Finance* is found in the Mauryan system. In this classification which is primary and secondary, defence takes the first place under the primary heads. Army, navy and transport were the important items of military expenditure. In the *Arthaśāstra*, we find details of the pay of the army from the ordinary soldier to the commander-in-chief. (Bk. V. 3).

* I have followed M. H. Gopal (*Mauryan Public Finance*, p. 195.) The equivalent in modern currency is on the calculation of V. A. Smith who valued the silver *pana* as equal to a shilling. If Pliny is to be believed the Mauryan king had a standing army of 600,000 foot soldiers, 30,000 horse and 9,000 elephants. This alone entailed an expenditure roughly of £17,000,000. This does not include the pay of the army officers such as commander-in-chief and commanders, the expenses of the fleet, of the armoury and arsenal of the commissariat, and several minor departments which were so many adjuncts to the Defence department. If these were included, we have to estimate the defence expenses of the Mauryan State to be several millions pound sterling. Arrian (*Indika*, ch. 12) tells us that the army officials were all paid very liberally. It appears that the Mauryan government believed in a contented army.

	Name of officer.	Pay in paṇas.	Approximate equivalent in pounds sterling.
1.	Commander-in-chief	48,000	2,400
2.	Commander	24,000	1,200
3.	Chiefs of—		
	Elephants	8,000	400
	Horses	8,000	400
	Chariots	8,000	400
	Infantry	8,000	400
4.	Superintendents of—		
	Infantry	2,000	100
	Cavalry	2,000	100
	Chariots	2,000	100
	Elephants	2,000	100
5.	Charioteer	2,000	100
	The army surgeon	2,000	100
	The trainer of horses	2,000	100
	Carpenter	2,000	100
	Trainer of other animals	2,000	100
6.	Soldier	500	25
	Clerical assistant	500	25
7.	Elephant driver	500 to 1,000	25 to 50

In a Basara seal inscription of the Gupta period we meet with a very important term: *Raṇabhaṇḍāgārādhi-karaṇa*.¹⁸ There is definite evidence that there was a separate accounts officer in charge of the military budget. This is a sure indication that by that time a distinction was made between the military budget and the civil budget. *Raṇabhaṇḍāgārādhikaraṇa* was the member in charge of military finance.

18 Fleet, *Gupta Inscriptions: Basrah seals*.

The *Śukranīti* gives figures relating to the proper apportionment of military expenditure to be incurred. We may take the figures as roughly representative of earlier times as well. The following estimate gives, according to the treatise, the proportion of the sums which may be spent on the various items of civil and military expenditure by a State with an income of 100,000 karṣas.¹⁹

Items of expenditure (annual) :—

1. Personal	18,000 karṣas
2. Clerical	1,200 "
3. Council (perhaps executive).	3,600 "
4. Family	3,600 "
5. Men of letters	2,400 "
6. Cavalry and infantry ..	48,000 "
7. Elephants and other service.	4,800 "
8. Savings	18,000 "
<hr/>	
Total	99,600 "
<hr/>	

Further, we are told that a State which has the same annual income is expected to have the following military establishment:—²⁰

1. Reserve Soldiers	100
2. Infantry men with guns ..	300
3. Cavalrymen	80
4. Chariots	3
5. Guns	2
6. Camels	10
7. Elephants	2

¹⁹ *Śukra*, IV, 7, 27-29.

²⁰ *Ibid.*, IV, 7, 24-26.

8. Bulls	...	..	..	16
9. Clerical staff		..	..	6
10. Higher officers		..	..	3

From the figures²¹ we see that military expenditure was a little more than 50% of the total expenditure of the State. It may appear at first sight that the high proportion of military expenditure to the total income is an indication of a heavy burden on the people. But it was not so felt, since defence and protection were the most fundamental among the functions of the State.

An idea of the scale of salaries and allowances to armies has been already furnished. The importance of regular payment of salaries to soldiers and officers is insisted on by the *Arthaśāstra* writers. Nārada repeatedly speaks to Yudhiṣṭhira of its advantages.²² Śukrācārya recommends a handsome pay to the soldiers, besides occasional allowances. He says that accurate records with full details as to the caste, age, district, village, station, period of service, amount of pay and allowances of the soldiers and officers are to be maintained; full pay should be given to those who have completed the practical course of training and half pay to the apprentices.²³ The case of the soldiers

21 Cp. *Nīti*, p. 85.

22 *Mhb. Sabhā.*, V, 48-54.

23 सायंप्रातः सैनिकानां कुर्यात् सङ्गणनं नृपः ।

जात्याकृतिवयोदेशग्रामवासान् विमृश्य च ॥

कालं मृत्यवर्धि देयं दत्तं मृत्यस्य लेखयेत् ।

कति दत्तं हि मृत्येभ्यो वेतनं पारितोषिकम् ॥

तत्प्राप्तिपत्रं गृहीयाद्दद्याद्वेतेनपत्रकम् ॥

recruited from the wild tribes was different. Their soldiers were either paid in raw produce or permitted to indulge in plunder.²⁴ Trumpet-blowers and servants were paid each 120 *paṇas*.

Judged by the then existing standards, when wants were comparatively few and simple, the scale should be put down as liberal. But there is evidence to show that this must have varied according to time and place, and that no uniform scale of salary was ever in vogue. It would appear that the pay was proportionate to and dependent upon the economic condition of the times. Revision of scales according to the fall or rise of prices was effected. These statements are made in the light of a text in the *Mahābhārata*²⁵ where the pay of a warrior is mentioned as 1,000 coins per month, whilst in the days of Kauṭalya it was a little more than 40 *paṇas*. The importance of this high salary can be realised if we keep in mind the conditions under which the Mauryas and afterwards the Guptas extended the limits of their empires by incessant encounters with the non-monarchical and republican States. These required a strong force ever devoted to the king, and the result was a heavy military expenditure. Compared with the scale of Kauṭalya, Śukrācārya's must be considered very low. Not only was the pay low but the soldiers were made to bear the expenses of their clothing.²⁶ One thing must

सैनिकाश्शिक्षिताये ये तेषु पूर्णा भृतिस्समृता ।

व्यूहाभ्यासे नियुक्ता ये तेष्वर्धा भृतिमावहेत् ॥

IV, 7. 391-3; *Niti*, VI, 313.

24 *Ar. Śās.* Bk. IX, ch. 11.

25 *Sabhā.*, 85. 29.

26 IV, 7. 20-21.

be remembered in this connexion. Śukra's concept of the State is that of a small State, while Kauṭalya envisages an empire (*cakravartikṣetra*).²⁷

That the army expenditure was looked upon not as wasteful but necessary is seen even from the practice of the later Hindu kingdom of Vijayanagara. The *Āmukta-mālyada* of Kṛṣṇadevarāya makes a statement to that effect. (Canto IV, 262). Elsewhere (238) it definitely states that half the income accruing to the State should be set apart to maintain the army. According to Barbosa the pay of a soldier was 4 pardaos, i.e. Rs. 22½ to Rs. 28, and that of a high officer Rs. 47,000.²⁸

One item of expenditure on the military side was war relief to the relatives of deceased soldiers and their dependents. An undated *viragal* belonging to the 9th century in the Durga temple at Hosaholalu near Bayakura records the giving of such relief to the relatives of dead soldiers.²⁹ In the Kanarese inscriptions, again, the term *kalnattu* (also *kalnād*) stands for some such war relief.³⁰ We meet with a significant term in the Vijayanagar inscriptions, *Raktakoḍage*, which proves that war relief generally took the form of assignment of lands by the State to the family of soldiers who died in the service of the king.

War loans: Funds for military purposes were raised in exceptional circumstances. The *Mahābhārata*³¹

27 *Ar. Śās.* Bk. IX. 1.

28 See Sewell, *op. cit.*, p. 283.

29 181 of 1901, *S.I.I.*, vii, p. 245.

30 *Ep. Car.* XII, p. 111.

31 परचक्राभियानेन यदि ते स्याद्धनक्षयः ।

अथ साम्नैव लिप्सेया धनमब्राह्मणेषु यत् ॥ Śānti. 71-2.

says that in the face of sudden attacks and in the absence of the necessary wealth in the treasury, a king can appropriate part of the private property of his wealthy citizens by levying more taxes. From the same source we learn that the people who could really afford it voluntarily contributed towards the expenses of a war, for it was realised that in the safety of the king or kingdom lay, the safety of the subjects. Sometimes recourse was had to loans by the State and these were returned after the danger was over. The appeal to funds³² was made in the least offensive but most con-

प्रचारं भृत्यभरणं व्ययं संग्रामतो भयम् ।

योगक्षेमं च संप्रेक्ष्य गोमिनः कारयेत्करम् ॥

तस्माद्गोमिषु यत्नेन प्रीतिं कुर्याद्विचक्षणः ।

दयावानप्रमत्तश्च करान्संप्रणयन्मृदून् ॥ *Ibid.*, 87. 35-39.

32 प्रागेव तु धनादानमनुभाष्य ततः पुनः ।

सन्निपत्य स्वविषये भयं राष्ट्रे प्रदर्शयेत् ।

इयमापत्समुत्पन्ना परचक्रभयं महत् ।

अपि चान्ताय कल्पन्ते वेणोरिव फलागमाः ॥

अरयो मे समुत्थाय बहुभिर्दस्युभिः सह ।

इदमात्मवधायैव राष्ट्रमिच्छन्ति बाधितुम् ॥

अस्यामापदि घोरायां संप्राप्ते दारुणे भये ।

परित्राणाय भवतः प्रार्थयिष्ये धनानि वः ॥

प्रतिदास्ये च भवतां सर्वं चाहं भयक्षये ।

नारयः प्रतिदास्यन्ति यद्वरेयुर्बलादितः ॥

कलत्रमादितः कृत्वा सर्वं वा विनशेदिति ।

शरीरपुत्रदारार्थमर्थसंचय इष्यते ॥

vincingly style. In these ways the State secured the sum necessary to tide over the crisis.³³

SECTION III

THE ARSENAL

In dealing with the military organization in ancient India, mention must be made of the arsenal (*āyudhā-gāra*). The Kauṭaliya has a chapter on this.³⁴ There was a special superintendent over this department, which also went by the name of Śastraśāla. According to the *Viṣṇudharmottara Purāṇa*, whose date of composition is not yet established, the superintendent was known as *Śastraśālādhyakṣa* or merely *Śastrādhyakṣa*. He should be loyal, vigilant, and able in the discharge of his duties. His chief ability consisted in discriminating the five kinds of weapons.³⁵ The chief business tran-

नन्दामि वः प्रभावेण पुत्राणामिव चोदये ।

यथाशक्त्युपगृह्णामि राष्ट्रस्यपीडया च वः ॥

आपत्स्वेव निबोढव्यं भवद्भिः संगतैरिह ।

न वः प्रियतरं कार्यं धनं कस्यांचिदापदि ॥

इति वाचा मधुरया श्लक्ष्णया सोपचारया ।

स्वरश्मीनिभ्यवसृजेद्योगमाधाय कालवित् ॥ Śānti, 87, 26-34.

33 आपदर्थं च निचयात्राजानो हि विचिन्वते ।

राष्ट्रं च कोशभूतं स्यात्कोशो वेश्मगतस्तथा ॥

पौरजानपदान्सर्वान्संश्रितोपाश्रितांस्तथा ।

यथाशक्त्यनुकम्पेत सर्वान्स्वल्पधनानपि ॥ Śānti, 87, 23-24.

34 Ar. Śās. Bk. II. 18.

35 Quoted in Lakṣaṇaparakāśa (Vīramitrodaya), pp. 224-5.

sacted by this department was the manufacture of arms and armour and other accessories. Here again skilled workmen and mechanics of all grades were employed at fixed wages to do the work.

Various kinds of weapons were manufactured and kept in proper places. These weapons included armaments used in war in defending or destroying buildings, forts, and citadels. These consisted of movable engines, of which twenty-six varieties are mentioned. Five kinds of arrows and four kinds of bows with their various accessories were produced. Again, eleven varieties of *halāmukha* (ploughshare),³⁶ three kinds of swords with various types of handles,³⁷ seven kinds of razorlike weapons,³⁸ four or five kinds of stones³⁹ are given. To these was added the manufacture of a variety of armour of iron and leather, both for war animals and for the warrior. Ornaments for animals and chariots, goads and hooks and other appliances were also made and kept in stock. Kauṭalya prescribes various rules⁴⁰ with regard to the storage of weapons and armour. They were to be frequently examined, cleaned and exposed to the light of the sun. Weapons liable to be damaged by heat or cold or even by worms were to be kept with

36 शक्तिप्रासकुन्तहाटकभिण्डिवालशूलतोमरवराहकर्णकणयकर्षणत्रासिकादीनि च
हलमुखानि । *Ar. Śās. Ibid.*

37 निस्त्रिंशमण्डलाग्रासियष्टयः खड्गाः । *Ibid.*

38 परशुकुठारपट्टसखनित्रकुहालचक्रकाण्डच्छेदनाः क्षुरकल्पाः ।

Ibid.

39 यन्त्रगोष्पणमुष्टिपाषाणरोचनीहृषदश्चायुधानि । *Ibid.*

40 *Ar. Śās. Bk. II. 18.*

particular care. Registers were to be maintained in which were entered details as to the shape, size, value, number, and name of every weapon manufactured and distributed. And it was for the Superintendent, who may be equated with the modern Master of Supply, to see that an adequate number of weapons and other implements of war was always kept in stock.

Bhīṣma says⁴¹ that kings desirous of victory should manufacture a variety of arms and armour both for animals like elephants and bulls, and for soldiers. The armour for animals must be made of durable leather so as to afford protection against cuts or thrusts from bones, thorns, or other keen-edged objects. The arms consisted of well-tempered iron weapons of all sorts and sizes. It is also said that swords, lances, standards of different hues, coats of mail, yak tails, banners, battle-axes, spears, shields, bells and other instruments were to be made in enormous quantities and housed in their respective places in the store room.

The *Milindapañha* mentions three separate industries dealing with the manufacture of bows, arrows, and other weapons of warfare.⁴²

41 गजानां पार्थ वर्माणि गोवृषाजगराणि च ।

शल्यकण्टकलोहानि तनुत्राणि मतानि च ॥

शातपीतानि शस्त्राणि सन्नाहाः पीतलोहकाः ।

नानारञ्जनरक्ताः स्युः पताकाः केतवश्च ह ॥

ऋष्टयस्तोमराः खड्गाः निशिताश्च परश्वथाः ।

फलकान्यथ चर्माणि प्रतिकल्प्यान्यनेकशः ॥ Śānti. 100, 7-9.

42 C.H.I., i, p. 205.

The compiler of the *Agnipurāṇa* realised the necessity for a good and well furnished armoury. According to him an empty arsenal is itself an indication of the deficient system of defence, thus implying that for a king to offer a strong front to the enemy a good supply of arms is essential. In conclusion, the arsenal was a department of the State and no individual or firm could manufacture arms.

SECTION IV

FOREIGN DEPARTMENT

From the inter-tribal relations of earliest times the evolution was to inter-state relations and finally to international relations. The early epoch of the Vedas bears evidence of inter-tribal relations. It is therefore impossible to trace in Vedic literature anything like a separate war department. That such a department existed in the epic age—the age of inter-state relations—is again a matter of inference. We have no express mention of a foreign department either in the *Rāmāyaṇa* or in the *Mahābhārata*. The conception of a circle of states which is so elaborately described in the *Kauṭaliya* would mean the existence of an elaborate foreign office to realize the ends of the state. This receives corroboration from the records of Megasthenes. During the epoch of the Guptas there was a foreign office. The office of the foreign minister was distinct from that of the minister of peace. In the Allahabad Pillar Inscription of Samudragupta there occur two terms, *Sandhivigraha* and *Mahāsandhivigraha*, besides *Saciva*. The first was minister of peace and war, and the second was an officer superior to *Sandhivigraha*. Harisena

was foreign minister to the emperor Samudragupta.⁴³ Candragupta II also had a minister for foreign affairs.

The keynote of foreign policy was the maintenance of the balance of power. Students of English History will recall to their minds the reign of Henry VIII, whose famous foreign minister, Thomas Wolsey, pursued a similar policy in dealing with continental powers. This power was realised in ancient India by the excellent device of forming a circle of states. Ancient India was composed of a number of small states, each with a chieftain or a king at its head. Most of these were military chiefs and some of them stood in terms of subordinate alliance. Their relations were international in the sense that the obligations between one State and another were all matters of special covenant agreed to by the sovereign authority in each. In this respect it resembles the political conditions of ancient Greece. George Grote, the historian, writes:⁴⁴ "The relation between one city and another was an international relation, not a relation subsisting between members of a common political aggregate". This means that an Athenian citizen could not contract inter-marriage or acquire landed property in the next city of Corinth. A similar state of affairs prevailed in ancient India. Foreign affairs seemed to have been carried out on the principle, "never despise an enemy nor trust a friend," which is preached also in Buddhist works like the Jātakas.⁴⁵

43 Fleet, *Corpus*, 46. Cp. Śānti, 85. 30; *Agni Purāṇa*, 239. 8.

44 Vol. III, p. 259.

45 Vol. II, p. 165.

If the officials who manned the ship of the foreign office had not possessed the requisite strength and will, the working of the above policy in actual practice could not have been realised.

SECTION V

INTELLIGENCE DEPARTMENT

The Intelligence Department can well be taken to be a sub-department of the War Office. The employment of intelligencers and spies for both civil and military purposes was a regular feature in ancient Indian States. These men were set to reconnoitre the enemy country and report to the king on the military strength of the enemy, furnish information as to suitable sites for camps and battle-fields. The chief officials of this department were ambassadors and spies. In a subsequent chapter these will be treated separately and elaborately. The ambassadorial system and the system of espionage, especially the latter, must have cost the State a good deal. The documents mention a number of spies constantly in service, in and outside the State, besides regular institutes of espionage of which as many as five types are mentioned. Hence the establishment charges incurred by the State on these two institutions must have amounted to a considerable sum. The Cāras attained so much importance that, in one place, in the *Mahābhārata* they figure as one of the eight angas of an army.⁴⁶ In an earlier śloka it is said that Cāra is vividhopāya,⁴⁷ meaning that he takes different disguises to find out

46 Śānti, 58, 41. Both terms Cara and Cāra are used.

47 *Ibid.*, 34: See also *Agni Purāṇa*, 241.12.

correct information about the position of the enemies of the king.

SECTION VI

ARMY OFFICERS

From the epoch of the *R̥g Veda Samhitā* the Commander-in-Chief occupied a place very nearly equal to that of the king. Under a confederacy of tribes, the office of the General, the ' Great War Soldier ' makes its first appearance. The office sprang from the military necessities of society and had a logical development... from the great War Soldier of the Iroquois through the Teactli of the Aztecs, to the Basileus of the Grecian and the Rex of the Roman tribes, among all of whom, the office was the same, namely that of a general in a military democracy.⁴⁸ In Vedic literature he is known as *senāni*. He often assisted the Vedic king who led the host in person to the battle-field. There was another military official, the *grāmaṇi*, who was probably in charge of a minor portion of the host.⁴⁹ The *Senāni* tops the list of the *Rājakṛts* or king-makers, who came to be known in later Vedic times as *Ratnins* or recipients of *Ratnahavis*.⁵⁰ It is not possible to accept fully the view that the *grāmaṇi* was the leader of a troop. He was probably more a civil than a military officer. In the Buddhist literature the *Senāni* is a member of the *Aṣṭakula*.

48 Morgan: *Ancient Society*, pp. 149-50.

49 *C.H.I.*, Vol. I, p. 95.

50 *Śat. Br.* V, 3-1; *Taitt. Sam.* 1-8-9; K. P. Jayaswal: *Hindu Polity*, ii, pp. 16 ff; Ghoshal: *Hindu Political Theories*, p. 38.

When we pass on to the epoch of the Epics, we notice a slight change in the title. The Senāni becomes the Senāpati.⁵¹ Next to him in rank were Senāpranētaras.⁵² Each of these was the commander of one Akṣauhini. In the battle of Kurukṣetra, Drupada, Virāṭa and Dhṛṣṭadyumna, Śikhaṇḍin, Sātyaki, Cekitāna, and Bhīmasena were respectively leaders of the seven akṣauhinīs of the Pāṇḍava host. From among themselves one was selected by the War Council to be Commander-in-Chief. A great discussion ensued, and finally Dhṛṣṭadyumna was chosen. On the other side Bhīṣma became the senāpati.⁵³ The election of the senāpati over, it was the practice of the elected candidate to address a few words to the War Council presided over by the king. Bhīṣma's address to the War Council of Duryodhana may be cited as an illustration. He says: "I offer my prayers to Devasenāpati Subrahmaṇya and accept with pleasure the responsibility of the chief commander thrown upon me to-day. Being versed in the art and science of war I know how to direct soldiers of different grades, bhṛtan and abhṛtan. Know me to be Brhaspati in both strategical and tactical modes of warfare. I am versed in all kinds of military arrays, Daiva, Gāndharva, and Mānuṣa. I shall use them against the Pāṇḍavas. Oh! King, give up all fear. I shall fight the enemy and protect your army. Let thy heart's fever be dispelled."⁵⁴

51 Śānti, 85.31.

52 *Udyoga Parva*, 151.5.

53 *Ibid.*, 151, 3-8 and 156, 10-13.

54 नमस्कृत्य कुमाराय सेनान्ये शक्तिपाणये ।

अहं सेनापतिस्तेऽद्य भविष्यामि न संशयः ॥

Once elected General, the *senāpati* had full and complete control over the situation. The direction of the campaigns, encountering and withdrawing, were all in his hands. It would appear that he had his own war cabinet in which his immediate lieutenants were members. Thus we notice in the *Rāmāyaṇa* that Prahasta, the *senāpati* of the Rākṣasa host, had four *sacivas*—Narāntaka, Kumbhahanu, Mahānāda and Samunnata—who were also his lieutenants in the battlefield.⁵⁵

Though the designation of *senāpati* continued to be used in later times, it came to be loosely applied to military officials other than the Commander-in-Chief. For example, Kauṭalya speaks of a Nāyaka as the head of ten *senāpatīs*. Surely the term *senāpati* here cannot mean Commander-in-Chief. At the same time, he fixes the pay of the *senāpati* at 48,000 *paṇas*, and that of the Nāyaka at 12,000. Surely the *senāpati* here stands for Commander-in-Chief. The term is used largely and loosely in the Gupta and Pāla inscriptions.⁵⁶ In an

सेनाकर्मण्यभिज्ञोऽस्मि व्यूहेषु विविधेषु च ।

कर्म कारयितुं चैव भृतानप्यभृतांस्तथा ॥

याज्ञायाने च युद्धे च तथा प्रशमनेषु च ।

भृशं वेद महाराज यथावेद बृहस्पतिः ॥

व्यूहानां च समारम्भान्दैवगान्धर्वमानुषान् ।

तैरहं मोहयिष्यामि पाण्डवान्येतु ते ज्वरः ॥

सोऽहं योत्स्यामि तत्त्वेन पालयंस्त्व वाहिनीम् ।

यथावच्छास्त्रतो राजन्येतु ते मानसो ज्वरः ॥ *Ibid.*, Ch. 165, 7-11.

55 *Yuddha*. 57, 30-31; 58, 19.

56 *Fleet: Corpus*, pp. 167-8.

inscription we meet with the epithet *Mahāsenāpati*,⁵⁷ and this may lend support to the view that by *senāpati* we may not altogether mean the General-in-Chief.

The qualifications expected of a Commander-in-Chief were many-sided. He was normally a Kṣatriya. Sometimes members of the Brahman caste were chosen to fill that responsible post. Puṣyamitra Śunga was the *Senāpati* of the last Maurya king, Br̥hadratha. Generally persons who were versed in the Vedas and equally proficient in the practice of arms were appointed. Though Vaiśyas and Śūdras were debarred, still Śukra would select this officer from any caste, if he happened to be a *sūra* or a great hero.⁵⁸ Other qualifications were as follows: 'A native of the land, versed in the theory and practice of counsel, in *daṇḍanīti*, possessing virtuous qualities of heroism, energy and manliness, large-hearted and generous, a student of the *śāstras*, one who has few or no enemies but many friends and relatives, self-confident, and of towering personality, one fully acquainted with the actions of the four-fold forces of spies and scouts, skilled in all modes of warfare, one who is a linguist, and who has travelled to foreign countries and fully acquainted with the routes and roads therein, a diplomat, one who evokes confidence from his own troops, one who can fight the enemy and protect his own army, who is able to detect fraud and disguises of spies and messengers, and ever loyal to his country.'⁵⁹ Weighed by strategic considerations, he must be able to

57 *Ibid.*, p. 252.

58 सेनापतिश्च एव योज्यस्सर्वासु जातिषु ॥ II. 434.

59 *Kāma*. 18, 26-42; 19, 31-40.

order either advance or retreat.⁶⁰ To these the *Śiva Tattva Ratnākara* adds 'economical in expenditure'.⁶¹

The senāpati shouldered heavy responsibilities. He was answerable to the king and his council. Victory or defeat rested with him. On the eve of the outbreak of hostilities, the Commander-in-Chief brought full satisfaction to the army by rewards and honours and encouraged them thus: 'He who slew the enemy king would be awarded one lac of paṇas, he who slew the senāpati and kumāra, 50,000 paṇas, and he who slew other chiefs 10,000 paṇas and for slaying an elephant or chariot warrior 5,000 paṇas.'⁶² It was an additional inducement for the warriors to fight to the end.

In the same strain Bhīṣma speaks to Yudhiṣṭhira. Gathering together the leading warriors, they should be addressed thus: 'Those of your warriors who break the ranks of enemies or rally your retreating soldiers should have their pay doubled and should be honoured by you with food, drink, and seats equal to your own. The head of ten soldiers amongst them should be made the head of a hundred. And the careful hero who is the head of a hundred soldiers should be made the head of a thousand. Let us swear to conquer and never leave one

60 *Ar. Śās.*, Bk. X. 3.

61 *V.* 15. 57-9.

62 शतसाहस्रो राजवधः । पञ्चाशत्साहस्रः सेनापतिकुमारवधः ।

दशसाहस्रः प्रवीरमुख्यवधः । पञ्चसाहस्रो हस्तिरथवधः ।

साहस्रोऽश्ववधः । शन्यः पत्तिमुख्यवधः ।

शिरो विंशतिकम् । भोगद्वैगुण्यं स्वयंग्राहश्च इति ॥ *Ar. Śās.* Bk. X, 3.

another.'⁶³ In other words, 'Conquer or die, and conquer we must' was the slogan. The prospect of promotion and honours was a great inducement for the sacrifice on the part of the patriotic and brave soldier.

Thus the Commander-in-Chief, differently known as Pradhāna Senāpati, Sarvasenāpati and Mahāsenāpati, was the head of the military department of the State. His primary duty lay⁶⁴ in attending to the training and efficient organisation of the army and in enforcing discipline. Though he was invested with the status of a high minister, he was not a member of the council, if we are to rely on the authority of the *Nītivākyaṃṛta*⁶⁵ and the *Sukranīti* where this officer does not figure in the list of ministers. He occupied the key position in a campaign and his success or defeat decided the fate of the engagement. Hence it is ruled that the soldier who killed a Commander-in-Chief, or captured him alive, would earn the name of a hero and would be entitled to all honours.⁶⁶

63 अनौकं ये विभिन्दन्ति भिन्नं संस्थापयन्ति च ।

समानाशनपानास्ते कार्या द्विगुणवेतनाः ॥

दशाधिपतयः कार्याः शताधिपतयस्तथा ।

ततः सहस्राधिपतिं कुर्याच्छूरमतन्द्रितम् ॥

यथा मुख्यान्सन्निपात्य वक्तव्याः संशयामहे ।

यथा जयार्थं संग्रामे न जह्याम परस्परम् ॥

Śānti. 100, 30-32 (Trans. Dutt).

64 Cp. the *Viṣṇudharmottara* quoted in *Lakṣaṇaprakāśa*, pp. 233 f.

65 Ch. X.

66 Śānti, 98. 68-9.

It is pertinent to ask whether the Commander-in-Chief was a permanent officer of the State, or was appointed whenever a war broke out and held office to the end of that campaign. Evidence is in favour of both. Bhīṣma and Dhr̥ṣṭadyumna, generalissimos respectively of the Kaurava and Pāṇḍava hosts, were appointed by the war council on the eve of the Kurukṣetra battle and relinquished their offices after the campaign was over. But Kauṭalya makes him a permanent officer on a pay of 48,000 paṇas. This shows that both practices were in vogue in ancient India.

The Kumāra: As the State grew in power, extent, and importance, a regular hierarchy of officers featured the army organization. In early times, along with the king and the Senāni went the Kumāra or Crown Prince to the field of battle. In the legendary description of the battle of Bhaṇḍa with Lalitā, it is said that Kumārī, a daughter of Lalitā, accompanied her and offered to fight the Asura host, though she was young. She fought and won it.⁶⁷ It is doubtful whether the Kumāra occupied a status higher or lower than the Senāni in the hierarchical grade of military officials. A recent writer takes the view that the position of the Kumāra was probably inferior to that of the senāpati, for in the passage of Kauṭalya⁶⁸ Kumāra is mentioned after the Commander-in-Chief.⁶⁹ This view may be adopted in the light of the scale of salaries fixed for the Kumāra which is one-fourth of that fixed for the Senāpati. The pay of the Kumāra was 12,000 paṇas; but the *Niti-*

67 *Br. Purāṇa*, IV, ch. 26.

68 Bk. X, 3.

69 H. C. Ray. *op. cit.*, pp. 58-59.

prakāśa assigns to the Commander-on-Chief a rank below the Crown Prince.

Saciva: A noted member of the War Office was the *Saciva*. A number of *Sacivas* formed the War Council of a Commander-in-Chief. Reference has already been made to the *Sacivas* of Prahasta in the *Rāmāyaṇa*.⁷⁰ Besides tendering advice on the movements and operations of their army, they accompanied him to the battle-field and seconded his actions, just like the *Purohita* seconding the efforts of the king. In the fight of *Lalitā* with the Asura *Bhaṇḍa*, her army was composed of women who went by the name of *Śaktis*. *Lalitā* had two important officers, *Śridaṇḍanāthā*, the chief Commander, and *Śrīmantrināthā* or simply *Mantriṇī*. The latter analysed the situation of the army as well as that of the enemy then and there, and reported to her chief, *Lalitā*. She also advised her as to the course of action to be taken. *Lalitā* invariably followed her advice, which was given in consultation with the *Daṇḍanāthā*. The *Mantriṇī* even took part in the actual operations of the war.⁷¹

A *Saciva* was probably the minister of peace and war,⁷² who is known in later inscriptions as *Sandhivigrahaika*. According to the Udayagiri inscription of Candragupta II *Saciva Vīrasena*, who was the Minister of Peace and War, also accompanied the king to the battle-field.⁷³ Only a highly qualified person was

70 *Yuddha*, 57, 31.

71 See *Br. Purāṇa*, IV, ch. 26.

72 See *Śukra*, pp. 78-79; *Śānti*, 59, 67-8; *Manu*, VII, 160-61; *Agni Purāṇa*, 220, 3-5.

73 *Fleet*, pp. 35-36.

appointed as Sandhivigrahika. He should be well versed in all aspects of Śāḍguṇya, expert in all languages of his country and above all skilled in the modes of policy (naya), a term of much political importance in Hindu political literature.⁷⁴ In the Vijayanagar epoch he was known as Sarvasainyādhikāri, while a minister of war was known as a Dalavay.⁷⁵

OTHER OFFICERS

The schedule of military officers was, by no means uniform. According to one calculation the Pattipāla was the leader of 5 or 6 foot-soldiers. The Gaulmika was the head of thirty footmen. Both these officials also supervised watchmen especially on night duty. Both Śatānika and Anuśatika are said to be leaders of one hundred warriors. The Anuśatika must have been an intermediary official between the Śatānika and the Gaulmika. Sahasrānika was the officer in charge of 1,000 foot-soldiers, and Ayuktika of 10,000 warriors. All these officers belonged to the infantry corps. The Śatānika had the additional function of drilling soldiers in military exercises both in the morning and in the evening.⁷⁶ According to the *Śukranīti* the Nāyaka was in charge of twenty elephants or twenty horses. All the officials were distinguished by appropriate uniforms.

In the *Mahābhārata* we see another schedule of military officers. There were officers in charge of a platoon of ten, a troop of a hundred, and a battalion of

74 *Viṣṇudhar*, quoted in *Lakṣaṇaprakāśa*, p. 231.

75 *Ep. Car.*, XI, Dv. 29.

76 *Śukra*, II, 137-48. See Dikshitar: *Hindu Administrative Institutions*, p. 311.

a thousand men,⁷⁷ corresponding to modern sergeants, captains, colonels, etc. The *Arthaśāstra* seems to follow the epic in this particular, when it speaks of a Padika in charge of ten soldiers, of ten Padikas being under a Senāpati, and ten Senāpatīs under a Nāyaka.⁷⁸ But there is a considerable difference between the epic and the *Arthaśāstra*. The latter furnishes a scientific division of the officers into grades. The Senāpati was not in charge of 100 soldiers, as the epic would have it. But he was in charge of Padikas. In the same way the Senāpatīs were answerable to the Nāyaka. This is a graded system of officials quite workable in practical administration.

It seems more reasonable to suppose that there was an officer in charge of every unit of the army. The Pattipa or Pattipāla was an officer in charge of a patti, which consisted of one elephant, one chariot, one horse, and five footmen. Next was the military officer in charge of a Senāmukha, which had a total of thirty, of which 15 were foot-soldiers. The Gulmapa or Gaulmika was the leader of 90 men, 45 of whom were infantry, 27 were cavalry men, and 9 in charge of elephants and of chariots. Next came the officer who was the leader of a gaṇa of 270 men. Next in rank was the Vāhinīpati who was in charge of 81 elephants, the same number of chariots, 243 horsemen, and 405 foot-soldiers. The *Rāmāyaṇa*⁷⁹ in one place calls Prahasta, Rāvaṇa's

77 Śānti, 100, 32.

78 अङ्गदशकस्यैकः पतिः पदिकः । पदिकदशकस्यैकः सेनापतिः तद्दशकस्यैको नायक इति ॥ Bk. X. 6.

79 *Yuddha*. 57-12.

General, Vāhinīpati. Perhaps he was elevated to the rank of Generalissimo on the eve of the Rāma-Rāvaṇa yuddha. Above the Vāhinīpati was the officer in charge of the unit that went by the name of Pṛtana consisting of 2,430 warriors. Still above him in rank was the Camūpati in charge of 729 chariots and elephants, 2,187 horsemen, and 3,645 infantry. Among the military officials who figure in the Gupta inscriptions is one Camūpa, equated with Daṇḍabhinātha. Perhaps this was the officer in charge of the Camu unit of the army. Above the Camūpa was the officer in charge of Anikinī, and still above him in rank was the army officer who was the leader of an akṣauhinī. This officer is styled Senāprenatara in the *Mahābhārata*. There is no authority in our literary works to warrant such a gradation of officers. But we have ventured to conjecture that a similar grade of officers over the different units of the army existed in ancient India.

It we analyse the mass of Gupta inscriptions we notice different grades of military officers. These are Senāpati, Mahāsenāpati, Balādhyakṣa or Balādhikṛta, and Mahābalādhyakṣa or Mahābalādhikṛta. It is difficult to assign any graded rank to these four offices. From the commentary of Kullūkabhaṭṭa on Manu⁸⁰ it can be gathered that a Balādhyakṣa was the controlling officer of ten senāpatīs. Besides, there were the commandants of infantry and cavalry (Bhaṭasvapati) and of elephants (Katuka).⁸¹ We have already noticed the Camūpa and Raṇabhāṇḍāgārādhikaraṇa. Another officer belonging to the War Office was Sandhivigraha

80 VII, 189.

81 For some of these terms see *Harṣacarita*.

or Mahasandhivighraha. The latter is equated with Dūtaka. But until more satisfactory evidence is found, this equation will remain tentative and cannot be accepted as conclusive. But it is more reasonable to look for the identification of Sandhivighraha with the ancient officer of Saciva answering to our modern Foreign Secretary. The literal meaning of the term connotes that he was the Minister of Peace and War. Apparently Mahāsandhivighraha was the President of the War Office.

Thus we notice that with the passage of time the department of war grew, and if the Greek reports are to be relied upon, the organisation reached its perfection in the epoch of the Mauryas.⁸² According to Megasthenes, as we have seen, the control and the organisation of the army and navy were under an efficient staff of six boards consisting of 30 Commissioners in all. Five members constituted each board. The boards were in charge of cavalry, infantry, elephants, chariots, admiralty, and commissariat. Most of the offices continued to remain the same though different designations were given to them in different periods.

SECTION VII

NON-MILITARY OFFICERS

Besides the various military officials there were other officers and servants who were non-combatants but were attached to the War Office of the army on the march, especially the department of transport and co-ordinate supply. There was first the Purohita⁸³ who

82 *The Mauryan Polity*, pp. 193-4. 83 *AV. Bk. X*, 18.

went with the king to the field of battle accompanied by astrologers and soothsayers. Most of these were experts in Atharvan lore and consequently in reading bird-omens and other impending portents. In order to prevent misfortune, propitiatory ceremonies were gone through. The Purohita encouraged the soldiers on the eve of the battle and inspired them with new spirit and enthusiasm.⁸⁴ The Saciva was a non-combatant officer who went to the field of action with the king. Physicians, surgeons, carpenters, and other artisans came under this category of non-combatant officials. There was the Mahānasa, the head-cook in charge of rations and food supply. There were war musicians with their drums and gongs to encourage the troops to fight with greater vigour and energy. Yet another official was the Praśāsta,⁸⁵ in charge of sappers, miners and engineers (Vardhaki and Viṣṭi) who marched in advance, repairing roads and digging wells wherever necessary. He was also engaged in raising or pulling down fortifications and in erecting camps.

CONCLUSION

Thus the ancient Indian organisation of the army was efficient and excellent.⁸⁶ If it was not efficient,

84 *Ar. Śās.* Bk. III, 3.

85 पुरस्तादध्वनः सम्यक् प्रशास्ता ग्रहणानि च ।

यायाद् वर्षकिविष्टिभ्यामुदकानि च कारयेत् ॥ Bk. X, 1.

86 Speaking of the military organisation of Candragupta Maurya, V. A. Smith remarks: "It shows no trace of Hellenic influence. It is based on ancient Indian model and his vast host was merely a development of the considerable army maintained by the kingdom of Magadha." (*Early History of India*, p. 153).

would it have been possible for Candragupta Maurya to expel the Macedonian chieftains from India, and to defeat Seleukos; for Bindusāra to effect the conquest of the Dekkan and South India; for Aśoka to maintain diplomatic alliances with forest tribes and far-off nations; for Samudragupta to make a *digvijaya* of all India and for Harṣa to conquer and maintain a vast empire?

CHAPTER VI

STRATEGY AND TACTICS IN WAR

SECTION I

INTRODUCTORY

We have already seen that ancient Hindu wars were generally of two kinds—Dharmayuddha and Kūṭa-yuddha, just and unjust wars. This is an arbitrary division from both the moral and religious standpoints. Another division, we have noticed, was three-fold—*dharmaviṣaya*, *asuraviṣaya* and *lobhaviṣaya*. Yet another division was *daiva*, *mānuṣa* and *āsura*, according to the weapons used. Here *daiva* and *āsura* seem to some extent to belong to the realm of mythology. The *devāsura* wars come under this head. Men of the epic age indulged to some extent in the *asura* modes of war; and one chief feature of this *asura* war was the larger use of machines or mechanical contrivances which resulted in wholesale slaughter. The *mānuṣa* kind of war was the only accepted one. Yet another division of wars is seen in the *Mānavadharmasāstra*—land fights, hill and forest fights, and sea fights.¹

We shall, for the purpose of our present study, bring all wars under three heads. These are land warfare, naval warfare, and aerial warfare. Some may feel sceptic about aerial wars in ancient India; but the scepticism vanishes into thin air if the material available is properly analysed and studied. This may be regarded as the *āsura* element in the *mānuṣa* war; but we shall see more of this in the sequel.

Land fights, then, occupy our foremost attention. Before the beginning of the Christian era, land fights were the rule, and sea and aerial fights were the exception. Land fights generally included wars in the plain country, forests and hill regions, though it is to be noticed that the law-giver, Manu, makes a distinction between battles on the plains and those on the hills and forests. There is yet another recommendation of the law-giver, that as far as possible wars should be fought away from cities and villages, and on the edge of forest regions. This was due to two reasons. One was not to disturb normal civilian life. The other was the strategic advantage of scoring a victory without much fighting and shedding of blood. Hill wars were not frequent. Wherever the capital city was a citadel, it was besieged and taken by storm. Siege warfare was a land fight. The *Dasarajya yuddha* of the *R̥g Veda* is an example of a war on the plains in very early times. In the later heroic age, the battle at Kurukṣetra between the Pāṇḍavas and the Kauravas was a land fight where strategy and tactics were used to the utmost degree on both sides and which well deserves to be called an example of a tactical war. Alexander's battle with the Indian king, Porus, may be cited as an instance of a land battle where strategic skill was employed in a large measure.

We do not propose to go into the details of these wars, but shall proceed to an examination of the employment of strategy and tactics in them. Henderson says that strategy, according to the official text-book of the British Infantry, is the art of bringing the enemy to battle, while tactics are the methods by which a commander endeavours to over-reach the enemy when battle

is joined.² He holds that the end of strategy is the pitched battle. In fact every battle that was fought in ancient India was a pitched battle in the sense that it was elaborately arranged for by both the contending parties. If an invader resolved on an invasion of a neighbouring state and made satisfactory arrangements to that effect, he dispatched an ambassador to the enemy king, giving due notice of his resolution and thus giving him time to make his own arrangements for defence. Rāma sent Angada to Rāvaṇa on this account. The arrangements on either side consisted of repairs of fortifications, if necessary, storing of foodstuffs and arms and their accessories, and securing that the food supplies should never fail.³ The function of spies and scouts in warfare was to gather correct information on the strength of the enemy, to win over his people and officials by bribes, and to bring about dissensions between him and his feudatories; and is discussed in a subsequent chapter. This is the use of artifice, stratagem, or *finesse* in carrying out any project. With these preliminaries and with particular care about his transport and the commissariat, the invader lay in wait for an opportunity to attack the enemy.⁴

SECTION II

STRATEGICAL CONSIDERATIONS

THE MARCH

The actual march of the enemy is regulated by short

² Science of War, Ch. II.

³ Ar. Śās. XII, 3; Śānti, 120, 25.

⁴ Ibid., Bk. III, 4.

and long halts, well provided with commissariat, supplies and transport and communication facilities. There are two kinds of march. It may be a slow march when the invader feels that his offensive equipment is not strong enough to break up the enemy, or again when the enemy is making negotiations for peace. Otherwise he may make a quick or even a forced march.⁵ In the expeditions undertaken the element of time played a prominent part. The month of Mārgaśīrṣa (December) is generally recommended for long marches and Caitra (March-April) for short distances.⁶ But though this was the rule, there were exceptions. In case the conquering monarch found it advantageous to lead an expedition irrespective of the season, then he should do so.⁷ But it is the prescription of the *Arthaśāstra*, corroborated by the *Kāmandakīya* and the *Agnipurāṇa*, that during the hot season only asses, camels, and horses were to be used,⁸ in preference to elephants. The dewy season alone was fit for the use of elephants in marching. But a wise king is asked to avoid battle during the summer and rainy seasons.⁹

The Nāyaka led the army while the Senāpati guarded the rear. If the road on the route of the march was sufficiently broad, it was recommended that the front ranks should march in a crocodile-like (makara) order, and the rear in a cart-like order, both flanks marching

5 *Agni*. Ch. 242.

6 *Mhb.* v, 83, 7.

7 *Ibid.*, xii, 100, 9; *Manu*, vii, 182.

8 *Ar. Śās.* p. 365; *Kāma*. p. 287; *Agni*. p. 377.

9 *Śukra*. p. 238. For a description of the Mahratta army on the move see Broughton: *Letters from a Maratha Camp*, describing Scindhia's army on the march.

in a diamond-like array. But if the march lay through a narrow path, the army was to move in pin-like (*sūci*) order. These, in modern literature, are explained as perpendicular and parallel or flank marches. The march was undertaken only after the roads had been examined and cleared of thorns and shrubs.¹⁰ Conditions then were quite different from what they are to-day. Even on the march the army went arranged in battle order. This was undoubtedly in order to meet a sudden attack. It might be that the enemy would make a surprise attack on the route; and if the army marched with no order or in an irregular order, it would not be possible to face the enemy effectively.

If, during the course of the march (*daṇḍamārga*, as it was known in later Vijayanagar),¹¹ rivers and canals were to be crossed, this was ordinarily done with the help of elephants which, being heavy animals, would withstand the current. Or they were forded over by boats and canoes. Or again wooden and other bridges were thrown over with the aid of skilled engineers. But if in fording the enemy placed obstruction by throwing missiles from the other side, the invader should withdraw from the place and seek another favourable fording point to cross without the enemy's knowledge. Yet another regulation was that the army must not be made to feel fatigue or irksomeness during the journey. Above all, attention was drawn to the base of operations, for much of the success depended on maintaining communication with it. A river or mountain fortress was regarded as the best base.¹²

10 *Ar. Śās.* Bk. x, 2.

11 *Ep. Ind.* 19, 133-34.

12 *Ar. Śās.* Bk. X, 2.

How an army marched with its different units is described in detail in the *Agnipurāṇa*.¹³ First came the vanguard forces with their leader known as the Nāyaka. The purpose of an advance guard was to gather intelligence as regards the movements of the enemy. European History furnishes us with examples of generals who used and sometimes did not use this section of the army. Its use depended on the size of the army. Generals like Napoleon who took forces numerically strong made use of these, while those like Frederick the Great who commanded smaller numbers, did not find much use for it. In the middle of the line, besides the treasury and the women, were the king riding on a chariot or an elephant and also the front ranks of the army composed of picked men, well trained in all branches of warfare. The less brave and the less trained were placed behind in the rear. The flanks of the army in march were protected by horsemen, charioteers and elephant-men in successive order, so that they would not be attacked from the sides. And beyond the elephants marched the forest tribes recruited for the campaign. In the rear went the Commander-in-Chief. Whenever the troops retired for rest, sentinels and scouts were posted as picket guards in different directions to raise alarm at any surprise attack by the enemy.

With favourable omens and in the Uttara Phalguni Nakshatra auspicious for the march, Rāma set out with his forces towards the citadel of Lankā. Nīla was the Nāyaka leading the vanguard and surveying the route, which lay through an undulating tract of land and which required the boldness and talents of a tried general to

march through it. The march was through a region affording supplies of fruit, water and foodstuffs. Strong and well-disciplined monkey soldiers like Gaya, Gavaya, and Gavākṣa occupied the front ranks. R̥ṣabha took up the right wing, whilst Gandha and Gandhamādana held the left wing, and Rāma and Lakṣmaṇa marched in the middle. Powerful commanders like Jāmbavan and Suṣeṇa took up the command of the rear guard. Crossing rivers and marching up hill and down dale, the forces reached the shores of the ocean and encamped in three divisions. Bold and faithful monkey warriors like Mainda and Dvida served as pickets so as to give cover to the troops by patrolling, reminding us of Frederick the Great's campaign of 1760,¹⁴ celebrated for its fine marches and manœuvres.

SECTION III

THE CAMP

The next strategical point to be considered by the commander was the encampment. It is called in the Purāṇas and epics *Skandāvāra*,¹⁵ and in the inscriptions of Vijayanagar *Kandūcāra*.¹⁶ Generally thickly wooded spots were selected for the disposition of the troops. The best ground¹⁷ for entrenching horses is a level plain with no rocks and covered only with a few trees, and not

14 Carlyle: *Frederick the Great*.

15 *Br. Pur.* III. 49.9; *Rāma*. VI. 42.22.

16 Rice: *Mysore Gaz.* I, p. 579; *Ep. Car.* XI, 24. But the *Hariharaçaturanga*, a work of this period, mentions the term *Skandavāra* for a camp (*Bk.* VI).

17 *Mhb. Udyoga*: 152, 1, 2; *Ar. Śās.* Bk. X. 4; *S.T.R.* v. 14.25.9.

muddy; for chariots, a well-laid road, devoid of sand or mud, trees, shrubs, etc.; for elephants, one without mud or having a layer of sharp gravel; and for infantry and others, one free from all defects, but with available supplies of drinking water. It should be broad and free from thorns. The camp¹⁸ was usually quadrangular in shape, furnished with four entrances, six roads and nine divisions and with walls, towers and ditches thrown round so as to afford a defence in times of danger. This is illustrated from Bharata's camp on the banks of the Ganges on the eve of his meeting Rāma and from those of the Pāṇḍavas and the Kurus on the eve of the Great War. There were separate grounds for the drill and exercise of soldiers. Every division of the army was housed comfortably in inner apartments erected for the purpose. Honest and loyal men were posted to watch the movements of the enemy. It is said that eighteen divisions of sentinels should daily change their watches in turn. Outside the camp and at a distance from it, forest men should be posted in circular arrays. Even during the hours of the rest the king must be armed, always ready for action. Around the camp, again, secret pits were dug up and covered with thorns, nails, pikes and such other things as would cause hurt to those entering the camp from outside. The cavalry soldiers were generally selected as scouts and as pickets to protect the supply department, and to guard depots of stores of all kinds. It is recommended that other available camping grounds should be such as to place the enemy at a disadvantage. In the camps, drinking, gambling and other social enjoyments were prohibited,

18 *Kāma*. 16, 6-13; *Mhb. Bhāṣya*, I, 1-15.

and for men coming in and going out of the camp a system of passports¹⁹ was maintained in order to distinguish them from the enemy's spies who might enter in disguise and unobserved.

The camp was generally a self-sufficient unit. It was a miniature town. There were minstrels and women of lower and higher ranks. For instance, Draupadī and Subhadrā, in the Pāṇḍava camp of the *Mahābhārata* war, lamented the death of Abhimanyu. They were escorted back home by aged men.²⁰ All the four *varṇas* were found in it. The storing of arms as wells as of food-stuffs was ample. Physicians and surgeons were available for the treatment of the sick and the wounded.²¹ The army retired to rest after the day's labour. On waking up their first business was to offer prayers.²² In this connexion Kauṭalya remarks: "Kings and allies, in order to secure their triumph should observe in their encampment, the strict rules of self-denial, liberality and religion."²³

SECTION IV

SITE FOR THE BATTLE-FIELD

Another strategical consideration which engaged the general's mind was the choice of a proper site for the operations of war. It is thus laid down in the *Śiva-*

19 *Ar. Śās.* Bk. X, 1 and 2; *Kāma.* 19.45-50; *Śukra.* IV. 7.260-63.

20 *Mhb.* IX, 29, 65 and 73.

21 *Ibid.* *Udyogaparva*, 151, 58. 152, 13; 155, 5.

22 *Ibid.* VI, 19. 36-39.

23 *Kauṭalya*, Bk. IV, p. 306.

vyāsadhanurveda.²⁴ “ That battle-field which is damp, hard, full of gravel and water and contains granite and shrubs ought not to be chosen. But one without inundations, but expansive, covered with a little dust or an uninhabited plain, is the best theatre of war.” In the battle of the Hydaspes, it is said that Porus fixed that “ site where there was no clay but that the ground from its nature was all flat and firm, and suited for the movements of cavalry whether charging or falling back ”, and that he drew up his army in order of battle, the elephants being posted in the front lines at intervals of not less than 100 feet and before the whole body of his infantry, so as to strike terror into Alexander’s soldiers. The infantry was arranged in two lines, one behind the other, and also on the wings beyond the elephants. On both sides of the infantry the cavalry were posted, with chariots in front. According to the *Agnipurāṇa*,²⁵ again, strategic warfare must be conducted in forests, on rivers and on rainy days, for attacks on open grounds are always difficult. In the battle-field the commander should aim at the strategical position of the army in its various divisions. It was then the time for him to show his mettle. Śukrācārya says²⁶ that both small and big guns are to be stationed in front, and behind them the foot-soldiers. The wings are to be occupied by elephants and chargers. With regard to the general arrangement of the army in the field, the *Agnipurāṇa*,²⁷ says that the various divisions should stand neither too close nor too far apart, so that the soldiers can exercise their weapons freely and without obstruction of any sort. In the fore-

24 *Śārangadhara*, 1681-82.

25 Ch. 236, 59-60.

26 IV. 7. 343-5.

27 Ch. 236, 28-37.

front, the flower of the army are to be stationed, of course after keeping some as a reserve for an emergency. The most important portion that should not be neglected on any account, is the rear. Bold warriors armed with swords must occupy the front. Behind should stand the archers with bows and darts, then the horsemen, the charioteers and the elephant-men in order. Before the vanguard the leader of the army should stand holding firmly the flag-staff. The front is to be an extensive field so as to allow flanking movements without the least difficulty. This is evident from the fact that the war-wise leaders of Hindu India were accustomed to all kinds of strategical movements. As for the king himself, he was not to take an active part in the actual operations of the field. For if he should happen to fall, that would decide the battle instantaneously. Therefore he should continue to encourage the army only from the rear.

In this connexion we may invite attention to an important prescription of the *Agnipurāṇa*.²⁸ It says that a competent general should attack the rear of the enemy if he should find the ground in front and on the sides undulating. In such a situation it was not possible for the enemy to escape.²⁹ Kauṭalya recommends entangling the enemy in an ambushade by fording the river elsewhere if they guarded a particular ford.³⁰ This can be illustrated from the battle of the Ten Kings explained in the *R̥g Veda Samhita*.³¹ Here the contending parties were the Tritsus and the Bharatas. Both planned to

28 *Ibid.*

29 Compare Oman's remarks on the Byzantine general of the 10th Century A.D. (*op. cit.* pp. 208 ff.).

30 *Ar. Śās.* p. 365.

31 III, 53.

ramparts usually poisonous and thorny plants were allowed to grow.

Going back to the *R̥g Veda Samhitā*, we find tribes living in fortifications known by the name 'pūr', an earth-work strengthened by a palisade or, possibly, occasionally by a stone wall.³⁹ There are numerous references to such kinds of fortress buildings which were besieged and destroyed by the invading hosts. In the later Brāhmaṇa literature also there is a distinct reference to the existence of forts. In the annual sacrifice portion of the *Aitareya Brāhmaṇa* the three Agnis or fires are described as forming three forts to prevent the Asuras from disturbing the sacrifice.⁴⁰ These, being afraid of these fires, with Agni in front and behind, took to flight. Thus the Asuras and the Rākṣasas were exterminated. Here, even the idea of setting fire to the buildings as a last resort receives emphasis. In the *Kauṣītaki Brāhmaṇa* the Upāsadas are described as the citadel of the Asuras, the enemies of the Devas.⁴¹ Here, these take refuge against the gods. They make citadels of iron⁴² in this world, of silver in the atmospheric regions, and of gold in the sky beyond. It may therefore be said without any fear of contradiction that the use of forts was well known to the people of the Vedic age.

Coming to the epoch of the *Arthaśāstra*, Kauṭalya says: "In the construction of the rampart care should be had that on the outer portions there should be no space

39 *The Cambridge History of India*, Vol. I, p. 86.

40 ii, II (vii, I)—(A. B. Keith).

41 VIII, 8 (*Ibid.*)

42 RV. Bk. II, 20; III, 12; Cf. *Manu*. VII, 74.

whatsoever for movement of any sort and the few openings allowed should be covered with invisible obstructions: on the inner side of these ramparts there must be two platforms on opposite sides, a big hall, two upper-stories provided with an ascending and a descending staircase, iron bolts, massive beams, and turrets being thrown over the huge gates. What were known as Aṭṭālakas were places for locating both movable and immovable defensive weapons. Hanumān speaks of the imposing appearance of the Aṭṭālakas of the Laṅkā fortress. The fort was furnished with a lotus pool which should never dry up. There was a special place for the worship of the goddess Kumārī. Perhaps this refers to the *caitya*, usually a feature of the palace. Here the guardian deities were housed and prayers offered for the welfare of the kingdom in general. This expression also occurs in the *Rāmāyaṇa* in connexion with Rāvaṇa's palace. Between these towers or turrets broad streets were laid out with storied buildings on either side. There was a separate road for the gods. Perhaps the processions on festival occasions passed through this pathway. According to the *Arthaśāstra* the fortress was to be furnished with twelve gateways with passages, open and secret, both through land and water. From this different roads of various dimensions branched off, one leading to the neighbouring forests, and others to the country parts.⁴³

Kauṭalya then speaks of the construction of the royal palace inside the fort. This occupied one-ninth of the whole area of the fort. To the north-east of the palace lived the priests, ministers and other higher offi-

43 *Ar. Śās.* II, 3.

cials, while to the south-east were situated the kitchen and stables. On the western side the merchants, artisans, and kṣatriyas had their residences. Near these were located the offices and the treasury, while opposite were the store-house and the arsenal. To the southern side of the palace lived musicians, prostitutes, and superintendents of the city, of commerce, and of other departments. To the west lay the residences of the Śūdra classes and those engaged in small industries. In the north-west were the bazaar-streets and hospitals with clusters of guilds and groups of workmen of various trades and manufacturers. In the heart of the city were a number of temples devoted to different cults. In the northern and eastern directions were situated burial grounds for the lower castes and in the south those for higher castes. Heretics and the Caṇḍāla community had their quarters beyond these grounds. Flower, fruit and vegetable gardens, side by side with rice fields, lay scattered throughout, both within and without the city. A well with good drinking water was dug at a distance of every ten houses. All the essential articles of daily use, such as food-stuffs, oil, and salt, were stored inside the fort so as to suffice for long periods of siege.⁴⁴ From this it appears that forts were systematically designed.

Some of the *Dharmaśāstras* also throw light on the kind and use of fortresses in general. Manu,⁴⁵ says, "that the king should find his residence in a well guarded fort either surrounded by deserts, forests or water." The best is, indeed, the hill-fortress.⁴⁶ The

44 *Ar. Śās.* II, ch. 3.

45 *Manu.* 7. 70-71.

46 *Agni.* ch. 222.5.

importance of citadels is well brought out by Manu in the succeeding stanzas. Standing behind the battlements of the citadel one bowman could easily withstand one hundred bowmen and one hundred bowmen ten thousand bowmen.⁴⁷ A king was thus enabled to defend his capital against great odds with the aid of a few able archers and warriors. As a source of great defence, fortifications were a valuable feature of ancient states. But the existence of mere fortresses would not produce the intended effect. So Manu ordains that they should be garrisoned with a large equipment of soldiers, engines and water-supply. Without an ample provision of these things any amount of defence would be neither adequate nor efficient.

When the enemy attacked, the defender should take refuge in a fort, removing all the inhabitants of the villages into it and gathering in quantities of all sorts of grain available.⁴⁸ If this were not possible he might destroy the bridges and minor forts in his own territory and set fire to the grain stores, etc., so that they might not be used by the invading king. Fresh ramparts should be thrown round his own fort on the outside. The moats must be filled up with creepers and with sharks and crocodiles. Pointed and sharp spikes of various kinds must be fixed in the bottom of the moats, thus obstructing their crossing by the enemy. The walls of the fort should be defended with fire-implements and guns and the gateways with death-dealing engines. Śataghni or cannon and other weapons should be furnished on the impenetrable ramparts, so that an

⁴⁷ *Manu.* 7. 74-6.

⁴⁸ *Mhb. Śānti.* 59, 35-37; *Ibid.* 41-45.

effective defence might be offered even against a powerful invader. Thus in Bhīṣma's learned opinion a fort surrounded by a huge wall and a ditch full of water and furnished with only one entrance is the best.⁴⁹ It is again seen that the number of gates for the fort seems in no way to have been restricted. For example, if we may believe the testimony of Megasthenes, Pāṭaliputrā was encompassed by a moat six *plethrons*^{49a} broad and 30 cubits deep, and the ramparts were furnished with 572 towers and above all 64 gates.⁵⁰

Kāmandaka belongs to the Kauṭaliyan school. He speaks of only five kinds of fortresses, water, (e.g. the modern water defences of the Meuse), hill, forest, (e.g. the present Ardennes Forest affording natural obstacles), barren plain, or desert.⁵¹ The recommendations made for providing defence and safety are the same as in Kauṭaliya. As a typical illustration of a fort as gathered from literary sources, the castle of Laṅkā figures prominently in the *Rāmāyaṇa*. Hanumān describes the city as he saw it.⁵² The doors were huge and massive and fastened with iron bolts. Above them were stationed several kinds of arms and machines to guard them from invaders. Hundreds of Śataghnis were found arranged in order at the entrance. The walls were unscalable, and their sides were decorated with numerous precious stones of high value. Surrounding these there was a deep and wide moat filled with pure water and contain-

49 *Ibid.* 100, 15.

49a Plethron was a Greek unit of measurement about 10½ English feet.

50 *The Indica of Arrian* (McCrindle).

51 *Kāmandaka*, IV, 55-59.

52 *Yuddha*. ch. 3.

ing several wild aquatic animals. There were four bridges over the moat, protected on both sides with huge destructive engines. The citadel was further defended by water, hill, and other artificial fortifications. It was fully garrisoned with horses, elephants, and hundreds of brave Rākṣasa warriors.

There is also an interesting description of Ayodhyā in the same work. It was twelve *yojanas* in length and ten in breadth.⁵³ Broad and spacious roads were laid throughout. Everything was kept in order. It had strong gates with massive doors. By the side of the wall was a fathomless moat. In the city were numerous artisans, merchants, soldiers and other classes of people. Corn-fields and gardens met the eye everywhere.

The conception of fortresses in medieval India was not very different from that in ancient India. It would be interesting to study here how the *Mānasāraśilpaśāstra*, an important work on Indian architecture,⁵⁴ defines the *Padmaka* type of a fortress city having eight, twelve or sixteen gates and the whole surrounded by a huge wall and a moat. It is said that suitable sites for a fort are those where water can be got in all seasons and hence either near a sea-shore, or by the river-side or in a forest-plain. The gateways are to have huge double-doors, securely fastened by strong bolts. Above them are to be placed firing guns and other destructive war-machines with soldiers stationed near them.

Besides the *Padmaka* type, which has the plan of a circle or a square, other plans recommended are the

53 *Bālakāṇḍa*, ch. 5.

54 *Indian Architecture* (Ananthwalwar) Vol. III, Bk. i, ch. 9. (Text and Trans. by P. K. Acharya—Oxford Press, 1933).

svastika type, more or less rectangular in form, and the *kārmuka* or bow-like type. Over these towers are to fly flags with guardsmen near them and here music is to be played.⁵⁵ Just near the main gateway are to be built the royal palace and the residences of the principal officers. Behind was the harem. Between them the kitchens and store-rooms were located. In the south we have the arsenal and the pleasure gardens and in the north the fourfold forces. Separate quarters for all classes in the interior and separate tanks for men and beasts are a speciality. The guardian deity is to be worshipped in a separate apartment. Streets of different dimensions were laid out and equipped with lamp-posts. The suburbs of the castle-palace led to the country.

There is another equally important work on architecture, attributed to king Bhoja, *Samarāṅgaṇa-sūtradhara*, in which mention is made of four kinds of fortresses. Surrounded by a chain of lofty hills difficult to scale is the mountain castle. Full of thorns, shrubs and trees and interspersed with pieces of water on every side and with secret passages leading to and from it, is the *mūladurga* or forest castle. Surrounded by deep waters on all the four sides and presenting a beautiful physical appearance, it became a water-fortified castle. The last is the desert-fortification.⁵⁶ This classification, it may be observed, is the same as Manu's. But a later work like the *Hariharacaturanga* gives the traditional classification of six forts, and one of the names is worth noting, *Dharmadurga* (Bk. VI).

There are also several other literary references to

55 *Indian Architecture*, Vol. III, ch. xi.

56 Vol. I, ch. viii, 36-39.

the fortresses which are both interesting and valuable. According to the *Agnipurāṇa*, the fore-part of a city should be in the form of a bow.⁵⁷ Goldsmiths and other artisans were to occupy the south-east portions; actors and dancers the south, and the minor artisans and fishermen the south-west, the arsenal department in the west, public offices in the north-west, Brahmans and monks in the north, merchant guilds in the south-east; the Kṣatriyas, the army and its commanders in the east, the Śūdras in the west, and the Mlecchas on the outer fringe. Temples for the gods and other guardian deities were to be built in any direction; the harem and the palace of the king were to be in the east, while the royal kitchen and the store-room were in the south-east and the north.

The *Śivatattvaratnākara* has an interesting chapter on the use and construction of a fortress.⁵⁸ A king without a fort is compared to a snake without poison and an elephant without a rut. Here nine kinds of fortresses are mentioned. To the classical six of the *Mahābhārata*, three more are added. This only shows that as time went on, the types of fortresses increased in number. According to this late authority, the best are the mountain and the water-fortifications, while the Darudurga and Naradurga belong to the inferior kind. Secret ways with machines and weapons guarding them are mentioned, besides the collection of articles for daily use.

The fort must be garrisoned with all classes. But the artisans ought to be greater in number, since they are required for manufacturing war materials. Smaller in

57 *Agnipurāṇa*, I, 106.

58 Kalola, 5, Taranga, 6.

number may be the Brahmans, for their services are required only for propitiating the deities and performing the necessary rites to ensure victory. Otherwise they are not of much value for purposes of warfare. The *Śukranītisāra*⁵⁹ has the significant statement that to live in a fortress not furnished with food and weapons is to live only in imprisonment.

Again, in the Tamil classic, *Maduraikkāñji*, of the early centuries of the Christian era, there is an excellent description of the fortification of Madura,⁶⁰ the capital city of the Pāṇḍiyan king. It was intersected by grand streets with palatial buildings on both sides. A forest dense with the trees and shrubs difficult for the enemy to march through surrounded it and served as a sort of protection. It was succeeded in turn by a very deep moat of pure and clear water. There were huge gates, lofty towers above, and massive walls around, one of which was full of ornamental paintings. The palace stood high above these, with its numerous storied buildings and crowned with flags of various hues. There were two extensive bazaar streets attracting all classes of people throughout the day. Women decked with ornaments and well dressed were seen standing in the front verandahs of their houses. Here the Brahmans, the Buddhists, and the Jains lived side by side and in harmony. There were merchants and artisans of various trades and professions.

Taking a general view of the different descriptions of fortresses, some of these formations appear to be fantastic and recall those of China. Still the real

59 *Śukra*. I, 237-57.

60 *Ind. Ant.*, Vol. 40, p. 227.

military value of some forms of fortresses cannot be underrated. The mere possession of a fort would not by itself be of strength and value.

The *Agnipurāṇa* specifies five defects as seriously impairing the strength and value of fortresses in general.⁶¹ These are (1) the drying and silting up of the ditch with sand and mud; (2) the bad and neglected condition of the ramparts and towers; (3) the continuance in use of old, worn-out and inefficient instruments and machines of warfare; (4) a neglected arsenal and (5) an insufficient garrison of soldiers. So it was the duty of a king to see that a fortress was properly maintained to stand an effective siege.

SIEGE OPERATIONS

How the siege operations were conducted and what devices and tactics were adopted to get possession of the enemy's fortresses may next engage our attention. Five methods seem to have been employed in capturing a fort.⁶² They were intrigue, *apasarpan* or pretending to retreat, *vamanam* or winning over the people, *paryuvasanam* or actual siege, and *avamartha* or taking by assault. In Kautalya's opinion, an invading king should not, all at once, commence the siege of the enemy's fortress, for such a procedure would ultimately land him in trouble. So a regular siege must be preceded by a considerable reduction of the enemy's forces. This alone would easily lead him to victory in the struggle.

Employing means, whether fair or foul, the would-be conqueror should prepare the way for a well-laid siege.

61 *Agnipurāṇa*, Ch. 241, sl. 28.

62 *Ar. Śās.* pp. 407-08.

A messenger should speak highly of his omniscient and supernatural powers and of his close association with several deities, and thus evoke a sort of awe and reverence in the enemy towards him. Again, heretics and jugglers may be specially employed to seduce the enemy's subjects from their loyalty to their lord by playing upon their humour through the display of various kinds of magical tricks. Or again, officials in the employ of the invader should pretend to have been dismissed by their master and seek employment with the defending sovereign. And after they gained his confidence they were to aim at his life. Further, the would-be conqueror, to ensure eventual success, should win over guilds of merchants and other public corporations, and thus weaken the enemy. These and other methods prescribed by Kautālyā may appear to laymen as unscrupulous, but they could be justified on the ground that his work is a treatise of expediency, and therefore these various means recommended for winning over the enemy's subjects or reducing his strength have indeed an ethical character, for it is the svadharma of a kṣatriya king to conquer the enemy though it might cost his life.

With such preliminaries the invader might begin the siege if he found that everything else was in his favour and not in the enemy's.⁶³ The opportune moment to commence siege operations might be when the enemy was in distress or suffered from disease, when his officers were disloyal and given to bribery, or when he possessed inadequate or ill-equipped defences, or had no ally to support him. The invader should wait for some such

⁶³ *Ibid.*, pp. 404-05.

opportunity, and when it presented itself should not let it go, for there is only one tide in the affairs of men. Again, if the invader could not effect his purpose satisfactorily and found the enemy's people and officers above corruption or bribery, then he must have recourse to other and more effective means. Particularly when the enemy's subjects assumed the offensive, the invader might destroy their crops, water sources and stores, cut off their communications and place all kinds of obstruction in their path. This is only the *pratikriya* of Indian political literature. It is not, therefore, considered a sin. For instance, Hanumān burnt down the whole city as his tail was set fire to. Thus by destroying their crops and depriving them of their cattle, an invading king prepared the ground for laying a siege to the enemy's fort.

During the actual operations of a siege, the ditch surrounding the ramparts of a fort if empty, should first be filled by the besiegers with water and with mud and sand if it contained water. Then reaching the outer walls of the parapet, and finding them strongly guarded with well-equipped warriors, machines, explosives, and other materials might be used to bring down the walls by assault. In the meantime, the cavalry troops would be employed in forcing a passage through the various gateways of the fortifications. If these endeavours should not bear fruit, then recourse might be had to the use of fire. This was the last alternative, for Kauṭalya himself says that it is immoral and should be used only in an extreme crisis. Arrows vomiting fire could be shot both at the defenders of the fortress and into its interior. But this would not be sufficient to set fire to the whole of the fortress inside. So it is suggested that the tails of

birds could be tied with 'agniyoga' which, when deposited on the roofs of the houses, would ignite and reduce the whole building to ashes.⁶⁴ In a fragment of Megasthenes, mention is made also of a kind of boiling oil used in warfare and especially in sieges. It was extracted for the king, according to Ktesias, from a worm found in the Indus. The oil had the power to ignite everything. What exactly the worm referred to is, has not been finally settled, though Professor Wilson identified it with the alligator.

If, despite such methods,⁶⁵ the enemy would still not submit, and offer a defensive attack and there was no chance of bringing down the fortress, other methods were recommended as a last resort. One such method is to befriend the enemy, observe carefully his weak points, and suddenly strike him, thus depriving him of his citadel. If this should fail, the invader may feign defeat and exhaustion, and setting fire to his own camp, pretend to retreat, and thus induce the enemy to open his gates and come out. He should then turn back and take the fortress by storm without losing a single moment.

Another factor to be reckoned with was the use of elephants in siege warfare.⁶⁶ That these animals were used for demolishing the fort-walls is seen, beside other evidences, from the first fragment of the *Indika* of Ktesias. These animals were particularly trained for this purpose. At a given signal from their leader these animals rushed impetuously towards the walls and pressed themselves against them.

64 Even in modern wars, birds are not without use, (e.g. carrier pigeons are particularly useful in carrying messages).

65 *Ar. Śās.* XIII, ch. 4.

66 *Indika of Ktesias* (Fragments, *IV).

We have a good description of the siege of the Lanka fortress in the *Rāmāyaṇa*. Hearing that Rāma was approaching with vast monkey hosts, Rāvaṇa stationed very brave men to defend the four gates of his citadel, himself defending the northern gate.⁶⁷ The monkey warriors with trees and rocks destroyed the upper portions of the great walls and filled the moat with trees, rocks and straw.⁶⁸ Several thousands of monkeys under their leaders made an onslaught against the gateways. But the Rākṣasas hurled incessantly innumerable darts and Bhindipālas from the walls. Gradually all the Rākṣasas were killed. Finding that the city had not fallen, Sugrīva ordered what we may call a mass attack.⁶⁹ Thereupon the monkey-warriors with fire-brands in their hands advanced towards the gates and set fire to them. Some of them entered the city and set fire to the highways and byways as well as the great storied buildings and even the palace. Enraged at this, Indrajit thought of vanquishing the enemy by the use of stratagem.⁷⁰ He brought in his car an illusory figure of Sītā and had her slain in the presence of these monkey-warriors. Then he performed some *homas* and sacrifices at Nikumbhala secretly in order to overwhelm the enemy's forces and rout them thoroughly. But it was discovered, and he was soon killed by Lakṣmaṇa. It may be noted also that fire was resorted to only towards the end of the siege and that Rāma very dexterously allied himself with Vibhīṣaṇa who offered

67 *Rāmāyaṇa, Yuddha kāṇḍa*, ch. 36.

68 *Ibid.*, ch. 46.

69 *Ibid.*, ch. 75.

70 *Ibid.*, chh. 81-82.

to help him. This alliance with an important member of the enemy's party was, indeed, a clever move which ultimately paid very well. For but for his timely warning Indrajit might have finished his ceremonies at Nikumbhala and proved more than a match for the allies through his prowess and capacity for producing illusions. Lastly, the city was entered and Rāvaṇa was killed in a fierce battle. Thus did Rāma come into possession of the city.

According to the *Agnipurāṇa* the invading monarch should carefully note that part of the citadel over which the crows came in and went out, and concentrate his attack on that quarter.⁷¹ If this were done, it was believed that the fort would be captured in the end. Before starting on a military expedition, Kālidāsa says that the king should see that the capital fortress as well as the frontier fortifications were well-fortified and defended.⁷² For the value of a fortress to the king is incalculable. Only after such precautions had been taken did Rāghu set out on his famous Digvijaya.

Fear of foreign invasion is not the sole motive that necessitates the construction of these huge forts. Does not the lion, the king of animals, and a fierce destroyer of the gigantic elephant, have its abode in the mountain caves? So also there are advantages in a fortified palace.

Having thus captured the enemy's fortress, the invader should show mercy to the weak and the wounded. He must remove all his enemy's soldiers and warriors and replace them with his own men, lest the former should

71 *Agnipurāṇa*, ch. 232.

72 *Raghuvamśā*, Canto IV, 26, 17, 52.

do any mischief. Then he should make a triumphal entry into the palace with all the paraphernalia of a victor. After the fall of the citadel Laṅkā, Rāma with his hosts spent the night in the city adorned with his garland of victory. He generously granted the kingdom to Vibhiṣaṇa, the brother of the slain king.

Let me conclude this section by referring to the attitude of modern military experts towards the use of fortifications. Most of them take the view that as conditions exist at present fortresses are unnecessary and dangerous. The men garrisoning them might be better employed in other places. Both the country and the army are either ruined by them or draw from them no tangible benefit. They entail enormous and wasteful expenditure for their building, maintenance, and garrisoning with troops. In fine, fortresses are seldom anything but an incubus. These remarks of a weighty authority must be respected, though we see a tinge of exaggeration in them. There is a wrong notion that is still current, namely, that these forts have lost their military value and are an anachronism since the invention of gun-powder.⁷³ But Dr. Oppert and some other scholars have demonstrated that gunpowder was in use in ancient India even in very early times, and still those strongholds were recommended as safe ones.

No doubt they were costly defences and some of the soldiers mobilised in the forts could have played a useful part in the open field. But there is the other side of the shield. It was during the last Great War, as we all know, that the fortresses in Belgium offered a stubborn

73 Clarke's *Mediaeval and Military Architecture*, Vol. I. *Operations of War*.

resistance to the Germans, but for which the latter might in all probability have overwhelmed the whole of France. In fact they were decisive in arresting the progress of Germany. Therefore to decry the value of a fort is to misjudge its merit. It was perhaps rightly said that the "fortifications of Paris assure more powerfully the independence of France against the attacks of all Europe than the acquisition of many provinces which would only so much the more extend the frontier." It may be that the extensive use of gunpowder in recent times has facilitated their destruction much more quickly than before. But this is not a sufficient argument for condemning such a useful institution which has rendered glorious service through the ages. Even the use of heavy guns and shells has not thrown the dug-out trench out of its usefulness. Trench warfare is but one kind of defensive operation from the security of the fortified and protected underground trench.^{73a}

SECTION VI

TACTICS

In tactics we call a battle defensive if the enemy takes the initiative, and the defender awaits him from his own station. Among the six prescriptions of foreign relations we can roughly speak of *vigraha* as a war of offence and *āsana* as one of defence. In the great battle

73a The trenches during the Great War of 1914-18 and the underground fortifications of the Maginot and Siegfried Lines may be noted in this connection. It may be recalled that the Barrier Fortress effectively checked Louis XIV's ambitious schemes of conquest of the Netherlands in his wars.

of Laṅkā it was Rāma who took the offensive, while Rāvaṇa adopted a defensive policy. It was a long and weary march from Kiṣkindhā to Laṅkā. Further, there was the sea to be crossed. This was possible only by a rough causeway which was specially constructed by the engineering skill of Nīla at the instance of Rāma. This must certainly have lost Rāma much time; and Rāvaṇa, if he had wished, could have obstructed the building of the causeway. Common sense would have dictated that he should prevent the enemy from crossing the bridge by direct defence from the other shore. Apparently Rāvaṇa realised the advantage of the condition of the approaching enemy as well as of the ground on which he could reinforce his troops and draw them up in orderly array. Judged by the result, Rāvaṇa's adoption of this defensive policy was a tactical blunder.

In dealing with the conduct of war from the point of view of tactics, the range and the effect of different weapons are important. In tactics, however, we are concerned with arms in a finished state and not with their construction.⁷⁴ At the outset it must be remarked that Indian literature is replete with a number of mystical weapons, which seem to have been used by superhuman heroes and which legitimately belong to the Daiva and Asura forms of combat.⁷⁵ They were chiefly fought with charms and spells. The *Ātharva Veda Samhitā* is full of these. The object was to confuse the enemy and steal a march over him.⁷⁶ It is not to our purpose to mention these, as we are dealing

74 Clauzewitz, I, p. 113.

75 *Nīti*. II, 22-49; *Rāmā*. I, 27-28.

76 S.B.E. A.V. pp. 121-24.

with the mānuṣa form of battle, far from the realm of mythology.

Vyūhas: It would be interesting to consider the disposition of the army or order of battle, called *vyūha* in Sanskrit literature.⁷⁷ This belongs to the province of tactics, while the plan of war is strategy. It must not be forgotten, however, that the deployment and the drawing up of the army in array form the chief part of the plan of battle which should be arranged in accordance with the nature of the ground.

If the ground is level, the army may be arranged on *daṇḍa* or staff-like array and *maṇḍala* or circular array; if uneven, *bhoga* or snake-like and *asamhata* or detached arrays, and if complex, *viṣama* or an irregular array.⁷⁸ Kāuṭalya speaks of *Sama*, *Viṣama*, *Hasti*, *Rathi*, *Aśva* and *Patti* *vyūhas*. In all these arrays the fourfold forces are used, unlike the solid phalanx of the Greeks and the Romans, which was a square formation of heavy armed infantry drawn up in rank and file, close and deep. In the *samavyūha* all the four

77 The *Lakṣaṇaparakāśa* quotes at length on this subject from a work entitled *Rājaviṇaya*, apparently a work on war.

78 *Ar. Śās.* Bk. X, 3. The *Hariharacaturanga* follows the Kāuṭalya's *Arthaśāstra* in this respect and mentions six principal *vyūhas* with their sub-divisions and details of arrangement. These are the *maṇḍala*, *asamhata*, *bhoga*, *daṇḍa*, *varāha* and *prakṛti*. The last two, *varāha* and *prakṛti*, are new divisions put into use probably during the Muhammadan and Vijayanagar periods. As if to corroborate this, there is mention of *varāha* *vyūha* in a Vijayanagar inscription (*Ep. Car.* VIII, p. 186).

It was arranged in boar-like form. What was the principle that underlay the *prakṛti* *vyūha* it is difficult to say. We are told that at the battle of Raichur the army was divided into seven wings (Sewell, p. 336).

arms are placed at certain distance so that there may be free movement for every soldier in the use of his weapons. There must be three men-at-arms to oppose a charger, and fifteen men or five horses to oppose a chariot or an elephant. If it is otherwise, it is *viṣama vyūha*. In an array of chariots (*ratha*) nine chariots are stationed in front and the same number on the two flanks and the two wings. The same number is also used for elephant (*hasti*) and horse (*aśva*) *vyūhas*; but in the array of elephants, nine war elephants are in the front, the same number, but trained for riding purposes are on the flanks, and rogue elephants on the wings; in an array of infantry (*patti*), soldiers wearing coats of mail are in front, those without armour are on the wings and archers in the rear.⁷⁹

The other kinds of array are *bhoga* (snake-like) in which the army is arranged in a line one behind the other, *daṇḍa* (staff-like) in which the army stands abreast, *maṇḍala* (circle) in which the army is stationed in such a way as to be able to face all directions, and the *asamhata* (detached) array, and in which small groups of warriors act by themselves. The *daṇḍa* array becomes *pradara* when its flanks are projected forward. And it is *droṇa* when both the flanks and wings are so projected. Its counterpart is *asahya* where its wings are of great length. *Śyena* is formed when the front stretches out, with its counter *cāpa*. But if these four are arranged in the reverse order, they are known respectively as *cāpa*, *cāpakuṣi*, *pradhiṣṭha* and *supradhiṣṭha*. The *cāpa* with its front stretched out becomes *vajra* with its counter *sañjaya*.

79 *Ibid.*, ch. 5.

With flanks and wings extended, it becomes *sthūlakarṇa*, with the front twice the original length; *viśāla vijaya* is its counter array. With wings alone projected it is called *camūmukha*, and the reverse of this latter *Jhaṣāsyā*. The efficacy of these arrays in their days was its irresistibility and strength to break through the enemy's order of battle.⁸⁰

Again *sūci* is another variety of *daṇḍavyūha* where the various divisions of one army stand one behind the other. If this is of two lines, it is known as *valaya*, if of four lines, *durjaya*. *Sarpasārī* and *gōmūtrikā* are other varieties of *bhoga* order in which the front flanks and wings are of unequal depth. That is *śakaṭa* (cart) in which there are two lines in front, while the wings are like those of *daṇḍa* array. The converse order for this is *makara* (crocodile). *Pāripatantaka* whose counter array is *sarvatobhadra* is yet another variety of *bhoga* which is another form of cart-like array.

The different dispositions of the army under the *maṇḍala* classification are *sarvatomukha* (capable of turning in all directions), *sarvatobhadra* (auspicious), *aṣṭānika* (an eight-fold division), *vijaya* (giving victory), *vajra* (diamond-like), *kākapadi* (crow's foot), *ardhacandrika* (semi-circle-like), and *karkaṭakaśṅgi* (fish-like or crab-like). Some more kinds of arrays mentioned are *ariṣṭa* where the front, the wings and the rear are occupied by chariots, elephants and horses respectively, *acala* in which infantry, cavalry, chariots and elephants stand one behind the other, and *apratihata* in which elephants, horses, chariots and

infantry stand one behind the other. But all kinds of arrays could be resisted with success by *durjaya*.⁸¹

These *vyūha* varieties are also mentioned in the *Agnipurāṇa*.⁸² According to it, even a small body of soldiers, if drawn up in pin-like array, could hold its own against odds. Though every array mentioned was practically drawn up in five parts, yet all of them were not engaged at one and the same time. Usually one or two divisions were in active service, while the rest were kept in reserve to meet emergencies. But if the central division of the main portion of the *vyūha* was broken, then it was time to order a general retreat.⁸³ *Kāmandaka* names from *Bṛhaspati* the seven limbs of a *vyūha*, and from *Śukra* five limbs, and concludes by saying that there are seventeen varieties of *daṇḍa vyūha*, two varieties of *maṇḍala*, six of *asamhata*, and five of *bhoga*. These should be used in accordance with place and time by expert leaders who have a practical and working knowledge of them.⁸⁴

Strategy and tactics could be used with effect both in righteous and unrighteous warfare. Nowhere else is the application of these arrays so practically illustrated as in the Great War. In the *Mahābhārata* war *Bhīṣma* has recourse to different *vyūhas* on different days.⁸⁵ The army of the Kurus consisted of eleven *Akṣauhīnis* while that of the *Pāṇḍavas* had only seven. Seeing himself

81 *Ar. Śās.* Bk. X. 6.

82 Mr. Date furnishes plans of the following *vyūhas*: *sarpa*, *cakra*, *sūci*, *garuḍa*, *makara*, *śakaṭa*, *daṇḍa*, *kāka*, *simha* and others towards the end of his *Art of War*.

83 *Agni.* ch. 236.

84 *Kāma.* 20. 21-40, 53-55.

85 *Bhīṣma.* ch. 20, 18.

numerically inferior, but backed by the superior strategy and experience, Yudhiṣṭhira advises Arjuna to form a pin-like array as it was decisive in battles where a few had to fight against many. Its other advantage was that it was capable of expansion, when necessary. But Arjuna in reply expresses his desire to form that impenetrable array called vajra with Bhīma as its leader and king Virāṭa in the rear and the whole protected by himself. For it has the great advantage of facing all directions.⁸⁶ Śveta and Bhīṣma exchange winged arrows. Then the former cuts off his bow with his sword. But in the evening Śveta is killed by Bhīṣma.⁸⁷ The next day Dhr̥ṣṭadyumna is appointed commander and a krauñcāruṇa vyūha is formed. Arjuna is the leader of the vanguard. Drupada is its head and king Kuntibhoja and Caidya are its two eyes. A few kings were placed on its neck. Yudhiṣṭhira with his retinue takes a position at the rear. Bhīma, Sātyaki, and other horse-men constitute its right wing. Nakula and Sahadeva occupy the left wing. For to concentrate on the flanks is one of the unwritten principles of cavalry tactics.^{87a} On the joints of the wings are stationed elephants and car warriors as well as on the head, the back and the neck. The rear is protected by Virāṭa.⁸⁸ Bhīṣma forms

86 *Ibid.*, ch. 19.

87 *Ibid.*, ch. 48.

87a Cf. the tactics of the strong flanking parties (*tulghama*) of the Mongol and Mughals, especially in the first battle of Pānīpat, where Bābur scientifically combined artillery and cavalry, ready to wheel round and take the enemy in the flank or rear, (C.H. 1. IV. pp. 12-13). See also Rushbrook Williams: *An Empire Builder of the XVII C.* (Allahabad) 1918.

88 *Bhīṣma*. ch. 50, 40-58.

a counter array and blows his conch. Arrows, swords and battle-axes are used in succession. Arjuna fights with Bhīṣma, and Droṇa with Dhr̥ṣṭadyumna. Bhīṣma kills the Kalinga prince and his soldiers.⁸⁹

Then the gāruda vyūha is formed by Bhīṣma; Droṇa and Kṛtavarman are its eyes, Aśvatthāma and Kṛpa its head, Jayadratha its neck, Duryodhana its back, and Sūrasena and others its tail. The Magadhas and Kalingas form its right wing and other tribes the left wing. On this Arjuna forms a counter array in ardha-candra.⁹⁰ Again the Pāṇḍavas form the śṅgaṭaka vyūha against the ocean-like army of Bhīṣma.⁹¹

The next to be referred to in detail is the sarvato-bhadra array of Bhīṣma's army.⁹² Further, Droṇa draws his army in cart-like array and the Pāṇḍavas in the krauñca form.⁹³ Again, when Karna assumes the generalship at Droṇa's death, he forms the makara vyūha, while the Pāṇḍavas forms an ardha-candra.⁹⁴ Similarly, in the encounter between Bhīma and Duryodhana, various manoeuvres are displayed.⁹⁵

A close examination of the arrays used in the Mahābhārata battles affords proof of the existence of four kinds of movements common to them—circular, crooked, separate and compact, roughly corresponding to the deep and dense columns of mediæval England. The introduction of firearms brought about a transfor-

89 *Ibid.*, chh. 51 and 52.

90 *Ibid.*, 56, 12-19.

91 *Ibid.*, 88, 16 f.

92 *Ibid.*, 100, 2 f. *Śalya*, 7.20.

93 *Droṇa*. ch. 7, 10.22.

94 *Karna*. xi, 14-32.

95 *Ibid.*, 58, 21 f.

mation in the tactical disposition of troops. We find different formations in wars since the beginning of modern times. Methods in the formation of troops have been profoundly affected by the changes of armaments in different periods of history. Every method served a purpose in its own age. The conclusion is that we must not become the slaves of any particular method. From the *Agnipurāṇa*⁹⁶ we conclude that vyūhas like makara and sūci are to be formed if the danger is expected from the front, the sakaṭa or cart-like arrangement if danger is from the rear, the vajra if from the wings, and the cakṛa or wheel array if from all sides. And the General-in-Chief must invariably accompany the front which is indeed the danger zone. Acting up to these principles in all their encounters with Bhīṣma, Droṇa, Karna or even Duryodhana, the Pāṇḍavas won their victory by sheer manliness conducting themselves generously against the enemy. Does not diplomacy lend colour to strategical and tactical considerations also?

In the Kūṭayuddha, on the other hand, different tactics come into play. The idea that underlies this method of war is not Dharma. But still that form of war, to repeat what we have said, is warranted by the Śāstraic texts but only as a last resort. When Duryodhana was sinking, Aśvatthāma with Kṛpa and Kṛtavarman entered the Pāṇḍava camps undetected at night, and murdered Dhr̥ṣṭadyumna and the Pāñcāla warriors, set fire to their tents and returned.⁹⁷ The tactics adopted by Indrajit in the war with Rāma by

96 Ch. 242, 35 ff.

97 *Saupati*, ch. 8.

the murdering of Māyā Sītā so as to dishearten the monkey hosts, who witnessed the horrid scene and spread the news of Sītā's death, came upon Rāma as a great surprise.⁹⁸ But for the timely disclosure of the facts by Vibhīṣaṇa, Rāma might have desisted from further fighting.

Another method employed in Kūṭayuddha is to attack the enemy fighting on another front when he was engaged or the would-be conqueror would feign an open attack or retreat, draw the enemy into a trap and overwhelm him in the rear by attacks previously arranged. This is what we understand to-day as enveloping tactics. Generally the attacks were direct, and rarely was this tactical method adopted. When the Pāṇḍavas realised that Bhīṣma could not be conquered by a frontal attack, they arranged a plan of campaign in which the enemy would be overwhelmed from all sides. Indeed it proved effective to the Pāṇḍavas and detrimental to the Kurus. No restrictions embarrassed a king pursuing an unrighteous war. The enemy might be attacked whenever he was wearied or careless. Or he might be killed when asleep during day or night.⁹⁹ Thus the use of stratagem for destroying an enemy seems to have been advocated even by good men. Aśvatthāma cites the authority of Vedic scholars for the use of poison, fire, and illusory weapons as the road to victory.

98 *Yuddha*, ch. 81.

99 *Kāma*: 19, 54-66.

विषेण वा माधव मायया वा शस्त्रेण गोविन्द तथाग्निना वा ।

यैः तैरुपायैः अरविन्दनाभ शत्रोर्वधं वेदविदो वदन्ति ॥

Cf. *Ar. Śās.* XII, ch. 2, 4, 5; XIII, 2; XIV, ch. 1-4.

In this connexion the recommendation of the *Agni-purāna*¹⁰⁰ is noteworthy. False shouts of victory should be made to terrify the enemy and spread confusion in his ranks. These may, perhaps, find a parallel in enemy propaganda in modern wars in which defeats are sometimes advertised as victories.

Thus 'strategy' and 'tactics' are simply two different names, as has been well said, given to the same devices when applied in scales of different magnitude. There is no single rule applicable to the former which is not equally applicable to the latter as well.

CHAPTER VII

AERIAL AND NAVAL WARFARE

SECTION I

AERIAL WARFARE

No question can be more interesting in the present circumstances of the world than India's contribution to the science of aeronautics. There are numerous illustrations in our vast Purāṇic and epic literature to show how well and wonderfully the ancient Indians conquered the air. To glibly characterize everything found in this literature as imaginary and summarily dismiss it as unreal has been the practice of both Western and Eastern scholars until very recently. The very idea indeed was ridiculed and people went so far as to assert that it was physically impossible for man to use flying machines. But to-day what with balloons, aeroplanes and other flying machines¹ a great change has come over our ideas on the subject.

The use and value of air forces is not hard to assess. Their chief use lay until recently in the rapidity and skill with which the men flying did the scouting and reported to headquarters. They located the position of the enemy, which enabled them to direct the attack. We know from modern history that the French were the first to use balloons for this purpose. The discovery of aeroplanes has revolutionised the realm of

1 See in this connexion Golikere: *Through Wonderlands of the Universe* (1933), esp. ch. vi ff.

strategy and tactics. The present War has demonstrated that before the air arm everything else pales into insignificance.

Turning to Vedic literature, in one of the *Brāhmaṇas* occurs the concept of a ship that sails heavenwards. The ship is the Agnihotra of which the Āhavanīya and Gārhapatya fires represent the two sides bound heavenward, and the steersman is the Agnihotrin who offers milk to the three Agnis.² Again in the still earlier *R̥g Veda Samhitā* we read that the Áśvins conveyed the rescued Bhūjya safely by means of winged ships.³ The latter may refer to the aerial navigation in the earliest times.

In the recently published *Samarāṅgana Sūtradhāra* of Bhoja, a whole chapter of about 230 stanzas⁴ is devoted to the principles of construction underlying the various flying machines and other engines used for military and other purposes. The various advantages of using machines, especially flying ones, are given elaborately. Special mention is made of their attacking visible as well as invisible objects, of their use at one's will and pleasure, of their uninterrupted movements, of their strength and durability, in short of their capability to do in the air all that is done on earth. After enumerating and explaining a number of other advantages, the author concludes that even impossible things could be effected through them. Three movements are usually ascribed to these machines,—ascending, cruising thousands of miles in different directions in the atmos-

2 *Śatapatha Brāhmaṇa*, II, 3, 3, 15.

3 *R̥g Veda*, I. 117. 14 and 15. Here 'wings' may be 'sails'.

4 Ch. 31. . (Gaekwad Oriental Series).

phere and lastly descending. It is said that in an aerial car one can mount up to the Sūryamaṇḍala, 'solar region' and the Nakṣatra maṇḍala (stellar region) and also travel throughout the regions of air above the sea and the earth. These cars are said to move so fast as to make a noise that could be heard faintly from the ground.⁵ Still some writers have expressed a doubt and asked 'Was that true?' But the evidence in its favour is overwhelming.

The make of machines for offence and defence to be used on the ground and in the air is described. Some of these are water machines, musical instruments, door-keeper machines, streets, houses and pillars by means of 'yantra' or machine, and other varieties. These require separate study. Considering briefly some of the flying machines alone that find distinct mention in this work, we find that they were of different shapes like those of elephants, horses, monkeys, different kinds of birds, and chariots. Such vehicles were made usually of wood. We quote in this connexion the following stanzas so as to give an idea of the materials and size, especially as we are in the days of rigid airships navigating the air for a very long time and at a long distance as well.

यन्त्राणामाकृतिस्तेन निर्णेतुं नैव शक्यते ।
 यथावद्बीजसंयोगः सौश्लिष्टघं श्लक्ष्णतापि च ।
 अलक्षता निर्वहणं लघुत्वं शब्दहीनता ।
 शब्दे साध्ये तदाधिक्यमशैथिल्यमगाढता ॥
 बहनीषु समस्तासु सौश्लिष्टघं चास्वलङ्गति ।
 यथाभीष्टार्थकारित्वं ल्यतालानुगामिता ॥

इष्टकालेऽर्थदर्शित्वं पुनः सम्यक्त्वसंवृतिः ।
 अनुत्खणत्वं ताद्रूप्यं दाढर्येमसृणता तथा ॥
 चिरकालसहत्वं च यन्त्रस्यैते गुणाः स्मृताः ।
 एकं बहूनि चलयेद् बहुभिश्चालयतेऽपरम् ॥
 सुश्लिष्टत्वमलक्षत्वं यन्त्राणां परमोगुणः ।
 अथ कर्माणि यन्त्राणां विचित्राणि यथाविधि ॥
 नविस्तरान्नसङ्क्षेपात् साम्प्रतं संप्रचक्ष्महे ।
 कस्यचित् सा क्रिया साध्या कालः कस्यापि कस्यचित् ॥
 शब्दः कस्यापि चोच्छ्रायो रूपस्पर्शौ च कस्यचित् ।
 क्रियास्तु कार्यस्य बशादनन्ताः परिकीर्तिताः ॥
 तिर्यगूर्ध्वमधः पृष्ठे पुरतः पार्श्वयोरपि ।
 गमनं सरणं पात इति भेदाः क्रियोद्भवाः ॥
 कालो मुहूर्तकाष्टाद्यैर्मिन्नो भेदैरनेकधा ।
 शब्दो विचित्रः सुखदो रतिकृत्भीषणस्तथा ॥
 उच्छ्रायस्तु जलस्य स्यात् क्वचित्भूजेऽपि शस्यते ।
 गीतं नृत्यं च वाद्यं च पटहो वंश एव च ॥
 वीणा च कांस्यतालश्च तृमिला करटापि च ।
 यत्किञ्चिदन्यदप्यत्र वादित्रादि विभाव्यते ॥
 समस्तमपि तद् यन्त्राज्जायते कल्पनावशात् ।
 नृत्ये तु नाटकं चोक्षस्ताण्डवं लास्यमेव च ॥
 राजमार्गश्च देशी च यन्त्रात् सर्वं प्रसिध्यति ॥
 तथा जात्यनुगाश्चेष्टा विरुद्धा यास्तु जातितः
 ताः सर्वा अपि सिध्यन्ति सम्यक् यन्त्रस्यसाधनात् ।
 भूचराणां गतिर्व्योम्नि भूमौ व्योमचरागमः ॥
 चेष्टितान्यपि मर्त्यानां तथा भूमिस्पृशामिव ।

जायन्ते यन्त्रानिर्माणाद् विविधानीप्सितानि च ।

दुष्करं यद्यदन्यश्च तत्तद् यन्त्रात् प्रसिध्यति ॥ 31. 45-79.

An aerial car⁶ is made of light wood looking like a great bird with a durable and well-formed body having mercury inside and fire at the bottom. It has two resplendent wings, and is propelled by air. It flies in the atmospheric regions for a great distance, and carries several persons along with it. The inside construction resembles heaven created by Brahmā himself. Iron, copper, lead and other metals are also used for these machines. All these show how far art was developed in ancient India in this direction. Such elaborate descriptions ought to meet the criticism that the vimānas and similar aerial vehicles mentioned in ancient Indian literature should be relegated to the region of myth.

King Śatrujit was presented by a Brahman Gālava with a horse named Kuvalaya which had the power of

6. लघुदारुमयं महाविहङ्गं दृढसुश्लिष्टतनुं विधाय तस्य
उदरे रसयन्त्रमादधीत ज्वलनाधारमधोऽस्य चाग्निपूर्णम् ॥
तत्रारूढः पुरुषस्तस्य पक्षद्वन्द्वोश्चालप्रोज्झितेनानिलेन ।
सुप्तस्यान्तः पारदस्यास्य शक्त्या चित्रकुर्वन्नम्बरे याति दूरम् ॥
इत्थमेव सुरमन्दिरतुल्यं सञ्चलत्य लघुदारुविमानम् ।
आदधीत विधिना चतुरोऽन्तस्तस्य पारदभृतान् दृढकुम्भान् ॥
अयःकपालाहितमन्दबहिप्रतप्तत्कुम्भभुवा गुणेन ।
व्योम्नो शगित्याभरणत्वमेति सन्तसगर्जद्रसराजशक्त्या ॥
श्रुतसन्धितमथायसयन्त्रं तद् विधाय रसपूरितमन्तः ।
उच्चदेशविनिधापिततप्तं सिंहनादमुरजं विदधाति ॥ *Ibid.*, 95-99.

conveying him to any place on the earth.⁷ If it had any basis in fact it must have been a flying horse. There are numerous references both in the *Viṣṇupurāṇa* and the *Mahābhārata* where Kṛṣṇa is said to have navigated the air on the Garuḍa.⁸ Either the accounts are imaginary or they are a reference to an eagle-shaped machine flying in the air. Subrahmanya used a peacock as his vehicle and Brahmā a swan. Further, the Aśura, Māya by name, is said to have owned an animated golden car with four strong wheels and having a circumference of 12,000 cubits, which possessed the wonderful power of flying at will to any place. It was equipped with various weapons and bore huge standards. And in the battle between the Devas and the Asuras in which Māya took a leading part, several warriors are represented as riding birds.⁹

In the *Rāmāyaṇa* when Rāvaṇa was flying with Sītā in his aerial car to Lankā, Jaṭāyu, a giant bird, charged him and his car and this led to a duel between the bird and the Rākṣasa king. Golikere draws attention to a number of instances where fierce duels have been fought between man and bird of prey resulting in the damage of the aeroplane and its inmates, in some cases leading to a forced landing.¹⁰ Again, the Rākṣasa Droṇamukha offers his services to Rāvaṇa in his encounter with the vāṇara hosts to fight them either on the sea or in the sky or in subterranean regions.¹¹ After the great victory of Rāma over Lankā, Vibhīṣaṇa pre-

7 *Mārkaṇḍa Purāṇa*, ch. 20.

8 *Viṣṇu Purāṇa*, IV, ch. 30, 64-66; *Harivamśa*, ch. 44.

9 *Harivamśa*, ch. 43.

10 *Through the Wonderlands of the Universe*, pp. 124-126.

11 *Yuddha*, ch. 8.

sented him with the Puṣpaka vimāna which was furnished with windows, apartments, and excellent seats. It was capable of accommodating all the vānaras besides Rāma, Sītā and Lakṣmaṇa.¹² Rāma flew to his capital Ayodhyā pointing to Sītā from above the places of encampment, the town of Kiṣkindhā and others on the way. Again Vālmiki beautifully compares the city of Ayodhyā to an aerial car.¹³

The above allusions to the use of flying machines are not connected with actual warfare. The aerial wars mentioned in ancient literature belong to the daiva form, as distinguished from the mānuṣa. An example is the encounter between Śumbha and the goddess Durgā. Śumbha was worsted and he fell headlong to the ground. Soon he recovered and flew up again and fought desperately until at last he fell dead on the ground.¹⁴ Again, in the famous battle between the celestials and the Asuras elaborately described in the *Harivaṃśa*, Māya flung stones, rocks and trees from above, though the main fight took place in the field below.¹⁵ The adoption of such tactics is also mentioned in the war between Arjuna and the Aśura Nivāta-kavaca,¹⁶ and in that between Karṇa and the Rākṣasa¹⁷ in both of which, arrows, javelins, stones and other missiles were freely showered down from the aerial regions. In the *Vikramaurvaśīya*, we are told that king Purūravas rode in an aerial car to rescue Urvaśī in

12 *Ibid.*, ch. 123.

13 *Bāla.*, ch. 5.

14 *Mārkaṇḍa Purāṇa*, ch. 90.

15 *Harivaṃśa*, ch. 56.

16 *Vana.* ch. 172. Cp. *Rāma*, V. 47.5, 33: VI. 50.51.

17 *Droṇa.* ch. 176, 50.

pursuit of the Dānava who was carrying her away. Similarly in the *Uttararāmacarita* in the fight between Lava and Candraketu (Act VI) a number of aerial cars are mentioned¹⁸ as being employed and it is further said that the flags and chowries with which these cars were bedecked were set fire to and destroyed. News of this reached Rāma who flew immediately in his car Puṣpaka and alighted on the spot. Knowing Lava to be a tried and resolute soldier, Rāma requested him to withhold his missiles, to which he nobly agreed. There is a statement in the *Harṣacarita*¹⁹ of Yavanas acquainted with aerial machines. The Tamil work *Jivakacintāmani* refers to Jivaka flying through the air.²⁰

But it has to be inferred that being very costly, their use was more or less the exclusive privilege of kings and aristocrats. Another reason why they did not become common is found in the following lines from the *Samarāṅganasūtradhāra*:

यन्त्राणां घटना नोक्ता

गुप्त्यर्थं नाज्ञतावशात्

तत्र हेतुरयं ज्ञेयो व्यक्ता नैते फलप्रदाः

कथितान्यत्र बीजानि यन्त्राणां घटना न यत् *Ibid.*

This supplies a certain clue to the right understanding of the decline of this art. The make and construction of these contrivances were usually kept secret lest others should get a knowledge of them and use them for wrong ends.

¹⁸ *Uttararāmacarita*, Act. VI.

¹⁹ *Dāṇḍopanatayavana nirmiteṇa Nabhastalayāyinā yantra-yānena* : VI ucchvāsa.

²⁰ XIII. 2614. (5).

But to the common people and even to the military officials, the use of carrier-pigeons was of the utmost importance. There is enough to show that their use was well known to ancient peoples. Pliny relates that Brutus sent these pigeons, at the siege of Modena in 43 B.C., to his friends for help. Again, we find that they were used in 1167 A.D. as a means of communication between Syria and Bagdad. The letters were usually fastened to the wings. Despite the improved methods of communication by post and telegraph, even to-day they have their value. For when wars break out, there is every possibility that postal and telegraphic communication will be cut off or otherwise interrupted to the great detriment of the belligerent parties. But no one can prevent these birds from carrying information to the desired destination. Therefore even to-day in some countries in Europe the shooting and hunting of these birds is treated as an offence and severely punished.²¹ Coming to our own country, Kaṭālya also makes a side reference to pigeon houses that served as military stations, an indication of the use of the birds in early days. This is perhaps why we find them among the several presents given to kings.²²

To conclude, the flying vimāṇa of Rāma or Rāvaṇa was set down as but a dream of the mythographer till aeroplanes and zeppelins of the present century saw the light of day. The mohanāstra or the "arrow of unconsciousness" of old was until very recently a creature of legend till we heard the other day of bombs discharging poisonous gases. We owe much to the energetic scientists

21 Hildebrandt, *Airships Past and Present*.

22 *Cambridge History of India*, Vol. I, p. 399.

and researchers who plod persistently and carry their torches deep down into the caves and excavations of old and dig out valid testimonials pointing to the misty antiquity of the wonderful creations of humanity.²³

SECTION II

NAVAL WARFARE

In Kauṭalya *Arthaśāstra*²⁴ the admiralty figures as a separate department of the War Office; and this is a striking testimony to the importance attached to it from very early times. In the *R̥g Veda Samhitā* boats and ships are frequently mentioned. The classical example often quoted by every writer on the subject is the naval expedition of Bhūjya who was sent by his father with the ship which had a hundred oars (*aritra*.)²⁵ Being ship-wrecked he was rescued by the twin Aśvins in their boat. The writer in the Cambridge History of India, however, is of opinion that the Vedic Indians did not take part in ocean shipping, and bases his conclusion on the negative evidence that the rudder, anchor and sail are not mentioned in the Vedas.²⁶ This *argumentum silentii* does not however prove anything. Though it cannot be asserted from the meagre evidence available that naval battles were fought in the Vedic period, yet the foreign trade of India from prehistoric times cannot for a moment be doubted. This extensive commercial inter-

23 *Introduction to Indian Architecture*, Vol. III.

24 Bk. II. ch. 28.

25 *R̥g Veda*, I, 116.5; X, 101.2; cp. *Vājasaneyisamhitā*, xxi, 7, *Śatapatha Brāhmaṇa*, IV, 2.5.10.

26 *Cambridge History*, I, p. 101.

course of India with foreign countries, including the Mediterranean lands and the African continent,²⁷ naturally led to piracy on the waters. There then arose the need for the protection of sea-borne trade, and we are told that "at the outset the merchant vessels of India carried a small body of trained archers armed with bows and arrows to repulse the attacks of the pirates, but later they employed guns, cannon and other more deadly weapons of warfare with a few wonderful and delusive contrivances."²⁸ These were probably the beginnings of the ancient Indian navy.

In the *Sānti Parvan* of the *Mahābhārata* it is said that the navy is one of the *angas* of the army.²⁹ Examples of ships being used for military purposes are not lacking. When Vidura scented danger to Kunti's five sons, he made them escape to the forest with their mother, crossing the Ganges in a boat equipped with weapons having the power of withstanding wind and wave.³⁰ This may perhaps be put down as river navigation. But in the *Dig Vijaya* portion of the *Sabhā parva*, it is said that Sahadeva crossed the sea and brought many islands under his sway after defeating the *Mlecchas* and other mixed tribes inhabiting them. If this be an historical fact the inference is irresistible that he could not have effected his conquest without the use of boats and vessels.³¹ We

27 See Dr. W. Vincent, Bk. IV: *The Commerce and Navigation of the Ancients*, pp. 457 ff. and *JMS.*, Vol. viii, pp. 77f.; Warmington: *A History of Ancient Geography* (Indian Ed. revised by M. Cary).

28 *Ibid.*, pp. 78-79.

29 Ch. 59, 41.

30 *Mhb.*, *Ādiparva*, ch. 143.

31 *Ibid.*, *Sabhā*, 31.

read in the *Rāmāyaṇa* that Durmukha, a Rākṣasa who had been fired by the impulse of anger at the deeds of Hanumān, offered his services to Rāvaṇa even to fight on the sea. There is testimony enough of the use of a fleet for war purposes, without which fighting on the sea would not be possible.³² There are other references here and there to ships in the *Rāmāyaṇa*. When Hanumān was crossing the ocean to Lankā, he is compared to a ship tossed by winds on the high seas.³³ Sugrīva speaks of Sumatra, Java and even the Red Sea,³⁴ when sending forth his monkey hosts in quest of Sītā. The *Amarakośa* mentions a number of nautical terms which stand for ship, anchorage (naubandhana), the helm of the ship (naukaraṇa), the helmsman (naukaraṇadhara).³⁵ That there were ship-building yards in different parts could be inferred from a significant term nāvātakṣeṇī occurring in a copper plate grant of Dharmāditya dated 531 A.D.³⁶

About 517 B.C. according to Herodotus, Darius launched a maritime expedition under Skylax of Caryanda to the Indus Delta, and during Alexander's time, again, we read of the people of the Punjab fitting out a fleet. We have the testimony of Arrian to show that the Xathroi (Kṣatri), one of the Punjab tribes, supplied Alexander during his return voyage with thirty-oared galleys and transport vessels which were all built by

32 अस्मिन्मुहूर्ते हत्वैको निवर्तिष्यामि वानरान् ।

प्रविष्टान्सागरं भीमम्बरं वा रसातलम् ॥ *Yuddha*, 8.8.

33 Sundara., 1, 68; *Ibid.*, 25.14.

34 *Kiṣkindha.*, ch. 40.

35 Cp. Varāhamihira, *Brhat Samhitā*: chh. V and VII.

36 *Ind. Ant.*, XIX. 198.

them.³⁷ Writing on the house of Euthydemos, Prof. Rapson remarks: "The Bactrian and Indian coins of Antiochus with their types of 'Poseidon' and 'Victory' must refer to a naval triumph; and it is difficult to explain the allusion except on the supposition that this king had won a victory on one of the great Indian rivers—the Indus or the Jhelum."³⁸ From this period down to the invasion of the Muhammadans to India the people of the Indus region showed their nautical skill in piracy, so that the Persians built no city worth the name on their sea-coast.³⁹

Further, it is said that Śūra Asura hid himself in the sea afraid of Subrahmanya, the god of war. The latter met and vanquished him.⁴⁰ Again, the Kālakeya Āsuras secreted themselves under the sea during day time after killing the Brahmanas during the night.⁴¹ If these instances are not due to the flight of the imagination of the Purāṇa writer and if any modern construction could be put upon them, they point to the use of submarines or of ships on the high sea in which they took shelter. It is open to future research to settle the question one way or the other.

Mānavadharmasāstra refers to sea fights and attests to the use of boats for naval warfare.⁴² The sailor is called *naukākarmajīva*.⁴³ Thus in Vedic, Epic and the *Dharmaśāstra* literature we find that naval warfare is

37 *India and Its Invasion by Alexander*, p. 156.

38 *Cambridge History of India*, Vol. I. p. 54.

39 Contra. Robertson: *Disquisition*, p. 160.

40 See *Skanda Purāṇa* for details.

41 *Mhb.*, *Vana.*, Ch. 102.

42 *Manu.*, VII, 192.

43 *Ibid.*, X. 34.

mentioned as a distinct entity, attesting a continuous naval tradition from the earliest times.

Passing on to the other literary evidence, we find in the *Raghuvamśa* frequent reference to boats and ships. Raghu in the course of his digvijaya conquered Bengal which was protected by a fleet (nausāadhanotyātān).⁴⁴ In another place it is mentioned that Raghu marched on Persia through the land route, and not by the sea route, thereby showing that the latter was the more common route.⁴⁵

As has been already stated, the *Kauṭaliya Arthaśāstra* makes express mention of the Admiralty as a department of administration. There was a superintendent (adhyakṣa) over this department. His jurisdiction included vessels bound for commerce also. Kauṭalya distinguishes ocean routes (*samudra samyāna-pathā*) from river routes and routes for coastal traffic (*kulapathā*).⁴⁶ Among the sea-going vessels men of war also figure, bound for the enemy's country (amitra-viṣyatigah).⁴⁷ That Aśoka continued to maintain a fleet is evident from the wide diplomatic relations which the emperor had with distant powers like the Hellenistic monarchies of the Mediterranean. That the early Andhras had a fleet of their own is borne out by the more reliable evidence of coins. The coins belonging to the reign of Pulumāyi (and also of Yaśñaśri) bear the figure of a two-masted sailing ship.⁴⁸ The coins were apparently issued to commemorate a naval

44 *Raghu.*, IV. 36.

45 See Mallinātha's Comment. *Ibid.*, 4. 60.

46 Book II, sec. 28.

47 See Dikshitar: *Mauryan Polity*, pp. 367-68.

48 See Rapson's *Catalogue of Indian Coins*, p. 22.

victory.⁴⁹ During the epoch of the imperial Guptas a naval force was maintained by the State, as is evident from the inscriptions. The Allahabad praśasti of Samudragupta refers to his conquest of several islands.⁵⁰ There is a reference to Jīvita Gupta II's army, which included a fleet of war boats.⁵¹ Later, Harṣa the emperor is credited with possessing a fleet consisting of boats.

The *Yuktikalpataru* of Bhoja, a medieval work of value, mentions two classes of ships. One is of the ordinary kind found in inland waters, of which ten varieties are distinguished. Of these, two divisions *dīrghā* and *umnatā* are mentioned according to the size. Among the *dīrghā* or lengthwise vessels figure ten boats. These are *dīrghikā*, *taraṇī*, *lolā*, *gatvarā*, *gāminī*, *tari*, *jaṅghālā*, *plāvinī*, *dhārinī* and *veginī*. *Umnatā* boats are five in number; *ūrdhivā*, *anūrdhivā*, *suvarṇamukhī*, *garbhīṇī* and *mantharā*.⁵² Of these the class of ships which went by the name of *Agramandira* was utilised for naval warfare (*raṇe kāle ghanātyaye*).⁵³

Dr. R. K. Mookerjee quotes from Elliot's *History of India*⁵⁴ a long account of a naval fight between two fleets in the eleventh century. It took place during the seventeenth expedition of Sultan Mahmūd to India. Arriving at Multan, Mahmūd ordered 1480 boats to be built each with three iron spikes, one on the prow and the other two on its two sides, so that whoever came into

49 *Sec I.H.Q.*, VI, pp. 649-50.

50 *Corpus, Ins. Ind.*, III, p. 14.

51 *Ibid.*, p. 217.

52 *R. G. Bhandarkar Comm. Volumc.*, pp. 451-53.

53 p. 228.

54 Vol. II. 478.

contact with it could be destroyed. Every ship was furnished with two archers with bows and arrows and also naphtha throwers. This force was opposed by the Jats who sent their families to the islands and launched, according to some, 4,000 boats, and, according to others, 8,000 boats manned and equipped for immediate engagement. Both fleets met and fought desperately. Every boat of the Jats was broken and capsized, resulting in the drowning of several men. Others who were left behind in the boats were all cruelly put to the sword.

Turning to the history of South India, we have evidence to show that the country had trade and culture contacts with foreign countries like Rome in the west and the Malay Archipelago and Indo-China in the east. Yavana ships laden with articles of merchandise visited the west coast of India very frequently. There was active foreign trade between Tamil India and the outer world at least from about the time of Solomon, i.e. about 1000 B.C. Roman historians refer to the commercial intercourse that existed between Rome and South India.⁵⁵ In the first century before Christ we hear of a Pāṇḍyan embassy to Augustus Caesar.⁵⁶ The Śāṅgam classics point to the profession of pearl-diving and sea-fisheries on a large scale. We hear of shipwrecks of the early Tamils saved now and then by Maṇimekhalai, the goddess of the sea. These instances are illustrative of the commercial relations between South India and foreign countries. We have

55 See P. T. Srinivasa Aiyangar: *History of the Tamils*, ch. XVIII.

56 For other activities about this period see the *Periplus* translated by Schoff, p. 46.

the account of a Cēra king conquering the Kaḍamba in the midst of sea waters.⁵⁷ The Cēra king Śenguttuvan had a fleet with which he defeated the Yavanas who were punished with their hands being tied behind their back and the pouring of ghee and oil on their heads.⁵⁸

From the evidence of the *Mahāvamśa* as well as from a few inscriptions we are able to gather some information regarding the diplomatic relations that existed between India and Ceylon. We have the story of Vijaya and his followers occupying the island about 543 B.C. Vijaya was a prince of North India who was banished from the kingdom by his father. Passing through the southern Maghada country he sailed to Ceylon, according to the *Rājāvali*, in a fleet carrying more than 700 soldiers, defeated the Yakṣas inhabiting it, and settled there permanently. This story is illustrated in the Ajanta frescoes.

According to the Kāśikuḍi plates, Simhaviṣṇu, the father of Mahēndravarmān, led an expedition to Ceylon and completely defeated its king who was proud of the strength of his arms.⁵⁹ During the days of Narasimhavarman I the confused politics of Ceylon made Mānavamma seek the help of the Pallava king, who in recognition of the help given by the Ceylonese prince in his conquest of Pulakeśin II, twice supplied Mānavamma with an army to invade Ceylon. The second expedition was marked by signal success, as a result of which Narasimhavarman occupied Ceylon. According to the Kāśikuḍi plates, the conquest of Ceylon by Nara-

57 *Paḍirrupattu*. V.

58 S. K. Aiyangar: *Contributions of South India*, p. 330.

59 *SII.*, Vol. II. pt. 5; p. 356.

simhavarman excelled the glory of Rāma's conquest of that island.⁶⁰ Nṛpatunga appears to have helped the Pāṇḍya king Śrī Mārā in the latter's expedition to Ceylon.⁶¹ According to the Vāyalūr pillar inscription, there seems to be an indirect but certain reference to the conquest of the Laccadive islands by Rājasimha.⁶² Negapatam and Māmallapuram appear to have served as naval bases during the days of the Pallavas; and during that period culture and commercial contacts continued to be maintained in the Far East. This is evidenced by the *Nandikkalambakam* and the Takuapa inscription.⁶³ The ship type of coins of the Pallavas is another evidence of their naval activities.

The Pāṇḍyan kings had close relations with Ceylon. Śrī Mārā's expedition to Ceylon has been referred to earlier. In the wars of Rājasimha with Parāntaka he was helped by the Ceylonese king. When there was a dispute between Parākrama Pāṇḍya and Kulaśekhara, regarding the succession to the Pāṇḍyan throne the Ceylonese ruler sent, on request from the former, a naval brigade under Lankāpura Daṇḍanāyaka, who after defeating Kulaśekhara erected a pillar of victory. Incidents like these show that the kings of the south as well as the ruler of Ceylon had each a well equipped fleet.

Likewise the Chālukyas had a strong navy. The Nilguṇḍa Plates of Vikramāditya VI say that king Mangaliśa of the early Western Chālukyas fitted out a

60 *Ibid.*: *Mahāvamśa*, ch. 47.

61 *Ep. Ind.*, xviii, p. 13.

62 *Ibid.*, p. 152.

63 See, for example, stanzas 46, 54 etc.: *J.O.R.* VI, pp. 300 ff.

naval expedition against the island of Revati and captured it.⁶⁴ The Aihole inscription credits Pulakeśin II with the reduction of Pūri with a fleet of 100 vessels,⁶⁵ while the Keṇḍūr plates of Kīrtivarman II state that Vinayāditya, the grandson of Pulakeśin II, subjugated Ceylon with war boats.⁶⁶

✓ The Chōlas also maintained a strong fleet with which they not only invaded and subjugated Ceylon frequently but also undertook oversea expeditions. Parāntaka invaded Ceylon, but his attempt was not a success. Likewise during the days of Sundara Chōla there was an unsuccessful expedition against Ceylon. Among the conquests of Rājarāja, Ceylon was one and his invasion of that island finds expression in the Tiruvālangāḍu plates⁶⁷ where it is described as follows:

‘Rāma built, with the aid of the monkeys, a causeway over the sea and then slew with great difficulty the king of Lankā by means of sharp-edged arrows. But Rāma was excelled by this (king) whose powerful army crossed the ocean in ships and burnt the king of Lankā.’

Rājarāja also sent an expedition against the Twelve Thousand Islands, obviously a reference to the Laccadives and Maldives.⁶⁸ Friendly embassies were also sent by the Chōla king to China.

The oversea expeditions of Rājendra are more striking. He conquered Ceylon and took the crown of

64 *Ep. Ind.*, XII, p. 151.

65 *Ibid.*, VI, No. 1.

66 *Ibid.*, IX, p. 205.

67 *S.I.I.*, iii, p. 421.

68 *Ibid.*, ii, p. 48.

the king and the more beautiful crown of his queen. The greatest feat of arms performed by Rājendra was the conquest of Kaḍāram and other places across the sea. Numerous ships carried the troops of Rājendra to Śrī Vijaya and its dependencies which he conquered. Among the places conquered were Pannai (Pani or Panei on the east coast of Sumatra), Malaiyur (at the southern end of the Malay Peninsula), Ilangāśokam (in the Malay Peninsula), Māppappālam (a place in the Talaing country of Lower Burma), Talaittakkolam (modern Takkola in the west coast of the Malay Peninsula), Mudammālingam (a place facing the gulf of Siam), Ilāmurideśam (the country in the northern part of the island of Sumatra), Nakkavāram (the Nicobars).⁶⁹ Besides, active trade was carried on between South India and China during the period. At the end of the 10th century the Chinese emperor sent a mission to the Chōla king with credentials under the imperial seal and provisions of gold and piece-goods to induce the foreign traders of the South Sea and those who went to foreign lands beyond the sea for trade to come to China.

During the reigns of the successors of Rājendra there were frequent wars between the Chōlas and the Ceylonese with whom the Pāṇḍyas were often in league. In 1077 Kulottunga I sent an embassy to the Chinese court for trade purposes. The men who visited the court 'were given 81,800 strings of copper cash, i.e., about as many dollars in return for the articles of tribute comprising glassware, camphor, brocades (called

69 For other names and identification see the learned article by M. Coedes in the *Bulletin de l' Ecole Française d' extreme Orient*, 1918.

Kimhwa in the Chinese text), rhinoceros horns, ivory, incense, rose water, putchu asafoetida, borax, cloves, etc.' ⁷⁰ About 1090, the king of Śrī Vijaya sent an embassy to the court of Kulottunga I after having built a *vihāra* at Śoḷakulavalli Paṭṭinam, probably the modern Negapatam. The facts clearly show that the Cholas maintained supremacy over the sea and kept a strong and powerful navy which was useful not only for carrying on extensive commerce with foreign countries but also for conducting military expeditions.

During the days of the Kākatiyas of Wāraṅgal, Moṭupalle (Guntur District) was the chief port on the east coast. Gaṇapatideva, the Kākatiya ruler, extirpated piracy on the sea and made the sea safe for commerce with foreign countries like China and Zanzibar. This policy was pursued by Rudrāmbā, his daughter.

The Vijayanagar kings also claimed supremacy over the sea. Since the days of Harihara I the rulers of Vijayanagar took the title of the Lord of the Eastern, Western and Southern oceans; and there were 300 ports in the empire.⁷¹ According to Ferishta, the ruler of Ceylon kept ambassadors at the Vijayanagar court and sent rich presents to the king every year. Virūnākṣa the son of Harihara II is said to have conquered Ceylon and set up a pillar of victory in the island.⁷² 'Abd-ur-Razāk says that (Lakkaṇṇa) Daṇṇaik, the Prime Minister of Dēvarāya II, went on a voyage to the frontier of Ceylon.⁷³ Dēvarāya II is credited in an epigraph with

70 See K. A. Nilakanta Sastri: *The Cholas*, II, pp. 25-26.

71 Elliot: *History of India*, IV, p. 103.

72 S. K. Aiyangar: *Sources*, p. 53; *E.I.*, iii, p. 228.

73 Sewell: *A Forgotten Empire*, p. 74.

having levied tribute from Ceylon (*Ilam tirai koṇḍa*).⁷⁴ Besides, Dēvarāya collected tribute from foreign countries like Pegu and Tenasserim.⁷⁵ Ludovico Varthema who visited the Vijayanagar kingdom in 1504 mentions that the Vijayanagar king was then waging a war with Tenasserim.⁷⁶ Kṛṣṇadēvarāya, Acyutarāya and Sadāśivarāya each claims to have invaded Ceylon.

The activities of the Vijayanagar fleet on the west coast are also referred to by the Portuguese. Timoja who commanded the Vijayanagar fleet in 1506 "was entrusted with the task of waging perpetual war with the Goa" which was then the possession of the Bijāpūr Sultans.

The Vijayanagar kings sent friendly embassies to foreign courts. Bukka I sent an embassy through his chief explainer to the court of Taitsu, the king Emperor of China, with tributes and large presents, among which was a stone which was valuable in neutralising poison.⁷⁷ These indicate in unmistakable terms that the Vijayanagar kings, as the Imperial Cholas, continued to have a good navy and retained the command of the seas.

But however interesting it may be, we have little information about the administration of the naval department and the building of ships. In the Vijayanagar days according to Rice the department appears to have worked under an officer called the *Nāriyadaprabhu*. He was stationed at Mangalore and acted Admiral of

74 144 of 1916; Rep., p. 60.

75 Sewell, *op. cit.*, p. 302.

76 Varthema, *Itinerary*, p. 74.

77 Bretschneider: *Med. Researches*, II, p. 211. *Ind. Ant.* XL, p. 140.

the fleet. He seems to have worked under the supervision of the Prime Minister or the Commander-in-Chief.⁷⁸ There was a squadron stationed off Bhatkal, with Goa probably as headquarters.⁷⁹

Some of the places where ships were built in South India were Calicut, Cochin, besides the Maldiv Islands. Regarding the size of the Indian ships we have conflicting accounts, beginning with those of the Arab travellers in the ninth and tenth centuries and ending with Vasco da Gama in the sixteenth century. Sulaiman remarks that the people of the Maldives "built ships and houses and executed all other works with a consummate art".⁸⁰

The description of ships by John of Montecorvino may be taken to be illustrative of Indian ships. He says: "Their ships in these parts are mighty, frail and uncouth with no iron in them and no caulking. They are sewn like clothes with twine. And so if the twine breaks anywhere there is a breach indeed. Once every year therefore there is mending of this more or less if they go to sea. And they have a frail and flimsy rudder, like the top of a table, of a cubit in width, in the middle of the stern, and when they have to tack, it is done with a vast deal of trouble, and if it is blowing

78 E.C. viii, Sb. 468.

79 See *New Review*, Vol. XIV. Dec. 1941. Here B. A. Saletore examines the naval policy of the Marathas. Based on the writings of two Maratha authors Krishnaji Anant Sabbasad and Ramachandra Pant Amātya, the men-of-war are mentioned as the gurab, the galabat, the tarandi, the tarav, the shibad, and the pagar. The fleet is said to be under the command of a Subhedar or Sarsubha. There was a decline of the navy under the Peshwas.

80 Farrand, *Voyage*, p. 32.

in any way hard, they cannot tack at all. They have but one sail and one mast and the sails are either of matting or miserable cloth. The ropes are of husk.”⁸¹ Indian ships appear to have been small in size. Barbosa observes that the Moors built keeled ships of a thousand and a thousand two hundred *bahares* burden, which would be about 224 tons.⁸² Varthema’s account of the ships built at Calicut shows that the ships were generally 200 tons.⁸³ According to Nicolo dei Conti, the carrying capacity of the ships was estimated at 2,000 butts or about 60,000 cubit feet.

In a large number of cases the merchant ships were converted into war vessels during times of war. Though the subject of Indian navigation is very interesting, it has been only very partially worked, as the material for the proper study of the subject is still scanty.

81 Yule, *Cathay*, iii, pp. 66-67.

82 Vascoda Gama, *The First Voyage*, p. 128.

83 Varthema, *Travels*, p. 154.

CHAPTER VIII

DIPLOMACY AND WAR

SECTION I

HISTORY OF DIPLOMACY

Notwithstanding the elaborate rules of war laid down in the epics and the law-books, insisting in the main that to wage war was the duty and privilege of every true Kṣatriya, in several cases the horrors of war made the belligerents think of the consequences and avoid outbreak of hostilities by a well calculated policy which we now term diplomacy. A recent writer says: 'Diplomacy is the name for a method of negotiation, persuasion and conciliation for promoting the common interests of different nations, and adjusting those interests which are opposed..... Without the diplomatic system war would be more frequent than it is. Behind the diplomatic system, however, lie the preparations for war: and in certain forms of policy, the threat of war is used as an instrument of diplomacy.'¹ It will be shown, in the sequel, how exactly this concept was enunciated and realised in ancient India. It may be noticed at the outset that the words *negotiation*, *persuasion* and *conciliation* are mere translations of the terms *sāma*, *dāna* and *bheda*, and the expression 'threat of war' may be equated with *danḍa*. These four were the cardinal points of the ancient Indian diplomatic system, and were effective instruments in averting many

1 C. D. Burns, *War*, pp. 81-3.

a war, which would otherwise have resulted in much bloodshed and economic distress.²

The political term for diplomacy is *naya*, and in the opinion of Kauṭalya, the eminent politician of the 4th century B.C., a king who understands the true implications of diplomacy conquers the whole earth.³

The history of diplomacy in ancient India commences with the *R̥g Veda Samhitā*, and the date of its composition may be taken as far back as the Chalcolithic period.⁴ In the battles the help of Agni is invoked to overcome enemies. He is to be the deceiver of foes.⁵ For it is said in another hymn that his foes are full of deceit.⁶ In pursuing his mission to a successful end, the use of spies is mentioned.⁷ This bears eloquent testimony to the system of espionage prevalent so early as the time of the *R̥g Veda Samhitā*. In the battle of the Ten Kings described in the seventh maṇḍala,⁸ we find the diplomacy of rulers getting supplemented by its association with priestly diplomacy,⁹ which exercised a healthy influence on the constitutional evolution.

2 Attention may be drawn to Kalidas Nag's book in French *Les Theories Diplomatiques de l' Inde Ancienne et l' Arthaśāstra* (Paris, 1923) of which I have published a translation in the *Journal of Indian History, Madras*, 1926-27.

3 नयज्ञः पृथिवीं जयति ।

4 See my note on the *Culture of the Indus Valley* (*Madras University Journal*, 1934, January).

5 *RV.*, iv, 15.4.

6 *Ibid.*, iii, 18.1.

7 *Ibid.*, iv, 4.3.

8 *Ibid.*, vii, 18.33.

9 See Nag., *op. cit.*, p. 10.

The diplomatic system gained more and more importance with the march of time. By the epoch of the *Atharva Veda Samhitā*¹⁰ we find the monarch as the centre of Hindu diplomacy occupying a seemingly absolute position, but subjected to discipline by his Purohita and public opinion. In this respect the ancient king differed from the Archon Basileus of Athens and the Rex sacrorum of early Rome.

According to a hymn in the *Atharva Veda Samhitā*,¹¹ Varuṇa had a number of spies who were thousand-eyed and who went forth hither and thither. This hymn, read along with other hymns in that Veda praying that the King may be invested with victory in battle, shows the diplomatic practices then in vogue. The *Atharva Veda* recommends the conquest of enemies more by artifice and stratagem and by spells and incantations.

By the time when the *Atharva Veda* was composed, the kernel of the *Mahābhārata* and the *Rāmāyaṇa* had come into existence. In these books we find the king gaining more power and influence. War and diplomacy have come to stay. They are no more in their primitive stage, but have become developed institutions. The tribal system has given place to organised communities, a good number of which took a leading part in the great battle between the Pāṇḍavas and the Kauravas.¹² Even in the first parvan of the great epic, the Ādi Parvan, we find a chapter (143) which discloses a stifling atmosphere of court intrigue and currents and cross-currents of

10 A.V., iii, iv, 1-6.

11 *Ibid.*, iv, 16.4.

12 See for details *JRAS.*, 1908—Pargiter's paper.

negotiation. There is then a discourse on diplomacy by a distinguished diplomat, Kaṇika, perhaps the Kaṇika-Bhāradvāja of the *Ārthasāstra*, to the blind and aged Dhṛtarāṣṭra, jealous of the Pāṇḍavas:

“Kings should ever be ready with upraised sceptre and they should ever extend their prowess carefully avoiding all faults of theirs; they should ceaselessly watch for the faults of other.

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“He (a king) should so act as others (his enemies) may not find any fault in him. But he should see the fault of others. He should keep his resources concealed as does a tortoise his members of the body.

“Having begun a particular act, he should always accomplish it. A thorn, if not wholly extracted, produces a festering sore.

“The killing of a harmful foe is always praiseworthy. If he be powerful, if he be escaping, if he be a great warrior, one should watch for the hour of his disaster, and then kill him without any scruple. O, son, if the enemy be weak, still he should not be scorned. A spark of fire can consume a forest if it can spread from object to object.

“They (kings) should sometimes feign deafness and blindness; for, if they are incapable of chastising they should pretend not to notice the faults. They should then consider their bows as made of straw, but they should be as watchful as a herd of deer sleeping (in the woods).

“When your enemy will be in your hands, destroy him by any means, open or secret. Do not show him any mercy, though he seeks your protection.

“ An old enemy should be killed even by winning him over by wealth. Thus you must be free of anxiety, for there is no fear from a dead man.

“ Destroy all the three, five and seven sources of the enemy; you must destroy them by uprooting them.

“ Then you should destroy their allies and partisans. If the root is destroyed, they (allies) can never exist.

“ If the root of the lord of the forest (tree) is uprooted its branches and twigs can never exist as before. Carefully conceal your own weaknesses and watch those of your enemies.

“ O, king, you should rule over your kingdom, ever being very watchful. By maintaining the perpetual fire, by sacrifices, by brown cloths, by matted locks and skin cloth, you should first gain the confidence of men (your enemies) and then you must spring upon them like a wolf. It is said that in earning wealth, hypocrisy is a cheap means. As a hooked staff is used to bend down the bough of a tree to pluck the ripe fruits, so this method should be adopted in destroying one's own enemies.

“ Carry your enemy on your shoulder till the time comes when you can throw him down and break him into pieces as an earthen vessel is broken being thrown on stones.

“ An enemy should never be allowed to escape, even if he piteously addresses you. You ought not to show him any mercy; he must be slain at once.

“ Enemies should be destroyed by the arts of conciliation, or the expenditure of money, or by producing disunion amongst his allies, or by the employment of every means in your power.”

Being further asked by Dhṛtarāṣṭra to give him

in detail the arts of conciliation, Kanika proceeds to narrate them. Its substance is as follows: The king should destroy by incantations, by gifts of wealth, by poison or by deception the enemy even if he be his own son, friend, father, or preceptor. In so doing, he should utter soft words, and after hitting should pity the victim and even shed tears over him. Securing confidence by conciliation and gift of wealth, or by any means, the enemy must be destroyed so effectually that he may not raise his head afterwards. Spies should act as diplomatic agents. Just like a fisherman catching and killing a fish, the king should tear the vitals of the enemy under a pretext. In getting rid of the enemy the king should be razor-like, sharp, and shining when opportunity occurs.

If this discourse, which smacks of Machiavellianism in a sense, is read together with what Bharadvāja is said to have narrated on the same subject to Śatrujit, the king of the Sauvīras, in the Śānti Parvan, we can perceive that there are certain differences, though in fundamentals there is agreement between them. Despite these diplomatic intrigues, the Pāṇḍavas came out successful and were treated to an excellent discourse by the sage Nārada, versed especially in the six-fold policy (ṣaḍ-guṇa-vidhi).

It would be a refreshing contrast to know the views of Nārada on diplomacy.¹³

“ With the six attributes of kings (viz., cleverness of speech, readiness in providing means, intelligence in dealing with the foe, memory, and acquaintance with morals and politics), doest thou attend to the seven

means (viz., sowing dissensions, chastisement, conciliation, gifts, incantation, medicine and magic)? Examinest thou also, after a survey of thy own strength and weakness, the fourteen possessions of thy foes? These are the territory, forts, cars, elephants, cavalry, foot-soldiers, the principal officials of state, the zenana, food supply, computation of the army and income, the religious treatises in force, the accounts of state, the revenue, wine-shops and other secret enemies. Attendest thou to the eight occupations (agriculture, trade, etc.) after having examined, and made peace with thy enemies? O bull of the Bhārata race, thy seven principal officers of state (viz. the governor of the citadel, the commander of the forces, the chief judge, the general in interior command, the chief priest, the chief physician, and the chief astrologer), have not, I hope, succumbed to the influence of thy foes, nor have they, I hope, become idle in consequence of the wealth they have earned? They are, I hope, all obedient to thee. Thy counsels, I hope, are never divulged by the trusted spies in disguise, by thyself or by thy ministers? Thou ascertainest, I hope, what thy friends, foes and strangers are about? Makest thou peace and makest thou war at proper times? Observest thou neutrality towards strangers and persons that are neutral themselves towards thee.

* * * * *

“Seekest thou to know everything about the eighteen tirthas of the foe, and fifteen of thine own, by means of three spies all acquainted with one another? O Slayer of all foes, watchest thou all thy enemies with care and attention, and unknown to them?¹⁴

* * * * *

14 *Ibid.*

“Marchest thou, without loss of time, and reflecting well upon three kinds of forces, against thy foe when thou hearest that he is in distress? O, subjugator of all foes, beginnest thou thy march when the time cometh, having taken into consideration all the omens you might see, and convinced that the resolutions thou hast formed, and defeat in their execution, depend upon the twelve maṇḍalas (such as reserves, and ambushades, etc.), and having paid the troops their pay in advance? And, O persecutor of all foes, givest thou gems and jewels, as they deserve, unto the principal officers of thy enemy, without thy enemy’s knowledge? O son of Pārtha, seekest thou to conquer thy incensed foes that are slaves to their passions, having first conquered thy own soul and obtained the mastery of thy own senses? Before thou marchest out against thy foes, dost thou properly employ the four arts, conciliation, gift (of wealth), producing disunion, and application of strength? O monarch, goest thou out against thy enemies, having first strengthened thy own kingdom? And having gone out against them, exertest thou to the utmost to obtain victory over them? And having conquered them, seekest thou to protect them with care ? ”¹⁵

In the foregoing texts there is a very important term, *upadhā*. The term *upadhā* anticipates the diplomatic code of Kauṭalya. The theory has been propounded that Kauṭalya is a close follower of the school of Kaṇika and that his principles are Machiavellian.¹⁶

¹⁵ *Ibid.*

¹⁶ See Benī Prasad: *The Theory of Government in Ancient India*, pp. 60-61. K. V. Rangaswami Aiyangar in *Some Aspects of Ancient Indian Polity*, pp. 114-15 shows similarities but insists that Machiavelli has been unfairly traduced.

I have pointed out elsewhere¹⁷ that this is not quite the correct view and cannot stand critical examination. Comparing impartially the principles formulated by Kaṇika with those of Kauṭalya, we note that the Kauṭaliyan code is not vitiated by intrigues and cruelty in utter disregard of all morality. Kauṭalya's political philosophy is of a high order and can fitly be compared with the theoretical principles furnished by the sage Nārada, to which we have already referred. The fundamental idea common to both is that 'conquest is not an end in itself; victory is counter-balanced by responsibilities, and acquisitions by the necessity of having to provide for safeguarding them'.¹⁸

Let me now proceed to trace in general outline the diplomacy of the Kauṭaliya.¹⁹ The basis of diplomacy is distinguished by seven elements (*prakṛti*).²⁰ These are the *svāmin* (king), *amātya* (ministers), *janapada* (kingdom), *durga* (fortress), *kośa* (treasure), *daṇḍa* (army), and *mitra* (allies),²¹ and are regarded as veritable elements of sovereignty. But sovereignty, according to Machiavelli, Hobbes and Hegel, seems to involve no moral responsibility. In other words, the State acts 'without regard to a moral standard.'²² An examination of the conditions which existed in ancient India in diplomatic practice does not warrant the conception of 'unmoral' or 'irresponsible' sovereignty.

17 See *I.H.Q.*, March, 1927.

18 See Dikshitar: *Hindu Administrative Institutions*, p. 274.

19 Nag: *op. cit.*, ch. iv.

20 *Ibid.*, Bk. VI, ch. ii.

21 Cp. *Agni Purāṇa*, ch. 238; *Manu*, IX, 294; *Yājñ.* I. 352; *Śukra*, I. 61.

22 See Burns: *op. cit.*, pp. 97-98.

Among the seven elements, the svāmin or king was the pivot of the whole system, and his office carried with it grave and great responsibilities (svāmi sampat). There is a catalogue of virtues expected of a good king.²³ According to Kauṭalya, sovereignty depends on the co-operation of the svāmin with the other elements like ministers, army, etc. Great care was to be taken in choosing the right type of men as councillors.²⁴ We are given an ideal description of a kingdom and a fortress, the third and fourth elements of sovereignty.²⁵ A rich treasury, a hereditary army, mainly composed of Kṣatriyas, and loyal allies are the last three elements,²⁶ which are rightly emphasised.

We pass on to the sphere of action,²⁷ which goes by the name of Maṇḍala, its conception being essentially dynamic. Except the madhyama and udāsīna, the other ten of the Rājaprakṛti form the ten diplomatic zones. The 'circle of states' is known as the *maṇḍala* group. The credit for the invention of this new policy is attributed to Śukrācārya.²⁸ We must not confound this new political theorist with the author of the treatise now extant and edited by Dr. Oppert. Undoubtedly the reference is to a work lost now. It is certainly not unreasonable to conjecture that Śukrācārya, the Purohit of the Asuras and a finished master of Vedic

23 Cp. *Kāma*, IV. 6-23.

24 Bk. I, ch. ix.

25 Bk. II, ch. 21.

26 Bk. VII, ch. 116.

27 *Ar. Śūs.*, VI. 2; Cp. *Kāma*. VIII, 43-90; *Śukra*, IV, 1.1-40; *Agnipurāṇa*, 232; *Matsya*, I, 344; *Manu*, VII. 154-58.

28 *Kāma.*, VIII, 22.

literature, took this idea from the Vedic rituals.²⁹ “Prajāpati, the God of Creation, once thought to himself, ‘May I become greater?’ For this he practised fervour. On this he was struck with what is known as the twelve-day rite. He grasped it at once and went through the sacrifice with it. He encircled the twelve-day rite with the fortification of Gāyatrī and won glory and prosperity. He who understands this is sure to prosper. Further, Prajāpati addressed the seasons and the months to sacrifice with him in the twelve-day rite. Those of the first half joined as allies in it, by which evil was effectively removed. The other half did not join in the sacrifice, and hence were regarded as enemies. He who realises this could do away with evil.” It may be said that the circle of twelve states with allies and enemies could have been evolved from this conception of the twelve-day rite. For it is said to consist of 12 kings, who, according to Kauṭalya, are Vijigīṣu (the invader), Ari (immediate enemy), Mitra (invader’s ally), Arimitra (enemy’s ally), Mitrāmītra (invader’s ally’s ally), Amitrāmītra (enemy’s ally’s ally), Pārṣṇigrāha (rear enemy), Ākranda (rear friend), Pārṣṇigrāhasāra (ally of rear enemy), and Ākrandasāra (ally of a rear ally).³⁰ Behind are the madhyama and the udāsīna, wrongly interpreted by Shama Sastri³¹ as ‘mediatory’ and ‘neutral’ kings. Dr. N. N. Law is right when he explains the term as ‘medium’ and ‘super’ and assigns them a right position in the circle.

The Madhyama is thus a stronger power inter-

29 *Ait. Brā.*, IV. 23; XIX. 1; IV. 25. (19-3).

30 *Bk. VI*, ch. 2.

31 *Trans.* p. 290 (Third Ed.).

mediate between the Vijigīṣu or the Ari on the one hand and the Udāsīna on the other. Both these are states of higher grades of strength perhaps 'to meet emergencies of references to such powers.'³²

The Vijigīṣu seems to have been invariably an emperor lording it over the states of the circle. That it was so is seen from the *Raghuvamśa* where Kālidāsa, the immortal poet, characterised Daśaratha as the central monarch of a maṇḍala of twelve kings. The term Vijigīṣu occurs in the Purāṇas and means the conquering king.

The *Mitākṣara* on the verse I. 345 of the *Yājñavalkya smṛti* has some interesting points on the maṇḍala question. There are different versions as to the constitution of a circle of states. Some fix the number at four, six or eight, and others at twelve. Immediate neighbours are hostile to each other, and those succeeding the first circle or the immediate neighbours are allies to the king at the centre. The centre of the circle is composed of the conquering king (Vijigīṣu) and his immediate enemy (Ari); and on the circumference are the different maṇḍalas of other States. Then follow orbits described in accordance with the laws of attraction and repulsion, primordial and fatal. This probably reflects the ancient astronomical theories of the movement of the stars. Thus the conception of Maṇḍala is dynamic. The kings residing in the surrounding circles are not neutrals, as some scholars seem to opine. The Kauṭaliya speaks of the four kinds of foreign rulers—Ari, Mitra, Madhyama, Udāsīna.

Each of these States, just like the central state,

possesses respectively śakti or power which is power of deliberation (mantra) with its adjunct of intellect, and power of lordship (prabhu) with its adjunct of treasury, and activity (utsāha) with its adjunct of heroic valour.³³ He who possesses more of everything is superior to the other. Besides, each of them possesses the five veritable elements of sovereignty: the minister, the country, the fort, the treasury, and the army. These sixty elements with the twelve kings form the seventy-two elements of a State.³⁴

We notice this maṇḍala idea in the Āśramavāsa Parvan of the *Mahābhārata*.³⁵ This portion of the *Mahābhārata* follows the Kauṭalyan principles and must be taken to be only later additions. It mentions the twelve maṇḍalas and distinguishes four kinds of enemies. It is said that these twelve, as also the sixty, having ministers for their foremost, should be looked after by the king. On these are said to depend the Śāḍguṇya. Or rather the attributes of these sixfold incidents rest on the seventy-two elements (12 and 60), and if this is carefully understood, a king might feel desirous of conquering the whole earth. We shall examine in the sequel the sixfold incidents. The foregoing survey makes one thing clear, viz. the increasing power of the ministers in the *Arthaśāstra* polity as contrasted with the king as the most important figure in the polity of the epic age. As we have it in modern times, the policy expressed through diplomacy was primarily in the hands of ministers of State in the fourth century

33 *S.T.R.*, V. 7. 14-39.

34 *Ar. Śās.*, VI, 1.

35 Ch. VI, 1-6. See also Māgha's *Śiśupālavadha*, canto. II.

B.C., as it is definitely laid down that the king can do nothing of his own will without consultation with his councillors. Hence the ministers are prominently mentioned among the seven elements and the seventy-two elements as well. It would be surely wrong to bring this kind of sovereignty into line with the idea of an unmoral and irresponsible sovereignty propounded by European writers of the Machiavellian type.

SECTION II

THE SIX-FOLD POLICY

*Sāḍgunyam*³⁶ has been translated in different ways, such as sixfold incidents, sixfold policy, and sixfold action or method.³⁷ These six methods are Sandhi or peace, Vighraha or war, Āsana or maintaining a post against an enemy, Yāna or preparedness for attack, Samśraya or friendship, and lastly Dvaidibhāva or double-dealing or duplicity. There are differences of opinion among political theorists with regard to their number and classification. For instance, Vāṭavyādhi says that Sandhi and Vighraha—peace and war—form the basis of the sixfold policy. But Kauṭalya's theory comprehended all the six methods. The conditions that determine the course of action are Daiva (providential) and Mānuṣa (human). The former is either *naya* or *anaya* (favourable or otherwise), whilst the latter is either *naya* or *apanaya* (equitable or other-

36 *Ar. Śās.* II, p. 23 (Trivandrum Series); *Rāma*, VI, 14.22 Govindarāja's Gloss.

37 *Ar. Śās.* VI, 98-99; *Agnipurāṇa*, Chs. 233, 239; *Manu*, VII, 159-180; *Śukra*, IV, 7. 232; *Kāma*. ch. 11.

wise).³⁸ These circumstances must be weighed in the balance of Kṣaya (low ebb), Sthāna (inactivity), and Vṛddhi (high tide), before a course of action is determined upon.³⁹ It is laid down that the invading monarch should set out for conquest when the enemy is slack and when his own State is in a condition of prosperity, with soldiers and animals in good condition.⁴⁰ He must influence the movements of the *madhyama* and *udāsīna* kings also, by any of the four expedients of statecraft such as Sāma (conciliation), Dāna (gift), Bheda (dissension), and Daṇḍa (coercion), or by using all of them simultaneously. It must be his endeavour to bring other kings under his dominion by such diplomatic methods.⁴¹ For it is realised that war is an evil and full of horrors and that it should be avoided as far as possible. Kauṭalya, who is actuated by honest motives, does not see anything dishonest or immoral in the employment of diplomacy and he naturally assigns to it a large place in the scheme of his work. This he seeks to achieve, statesman as he is, by any kind of *entente*. The nature of the *entente* rests upon the strength and resources of the parties concerned. Alliance (āśraya) should be sought with good kings and must be kept up to the end. Rāma allied himself with Sugrīva against the unrighteous Vāli and with Vibhīṣaṇa against the immoral Rāvaṇa. Of the six expedients to be pursued in foreign policy by a conqueror, the first is that peace may be concluded with equals and superiors.

38 *Br. Nīti*. VI. 1.

39 *Ar. Śās.* Bk. VI, ch. 2; Cp. *Mhb.*, *Āśramavāsa*, ch. 6. 6.

40 *Śānti*. 113; *Sārasāram balam*; *Ar. Śās.* VII. 1; *Manu*, 7.157; *Yāj.* I, 347-9.

41 *Manu*. VII. 159; *Viṣṇu*. ch. iii.

SANDHI OR THE TREATY SYSTEM

This is a frank and open procedure in diplomacy. To seek war would be ruinous to both the contending parties. To undertake an operation against a superior is like a foot-soldier opposing an elephant, and to make war against an equal is but the collision of unbaked mud vessels against each other causing mutual destruction.⁴² But the inferior must be attacked and made to submit if the differences cannot be amicably settled. There are also cases where an inferior king may sue for alliance with a superior by offering himself to help the latter with army, wealth, or land. This is called the *Hina-sandhi*.⁴³

The following is a list of *entente* methods under the category of *daṇḍa*.⁴⁴ When the inferior king delivers himself to a superior that *entente* is called *ātmamiṣa*, and when he offers as a hostage his general or commander-in-chief or Crown Prince, it is *puruṣāntara*. If he is allowed to withdraw with his army, it is *adr̥ṣṭa-puruṣa*. In case the treasury is offered, the *entente* is *pārikraya* (dependent on money), *upagraha* (dependent on heavy charges), *ātyaya* (harmful in space and time), *suvarṇa* (dependent on indemnity), with their opposite *kapāla* (involving heavy indemnities). In case land is surrendered, the *entente* is *adiṣṭa* (by cession), *ucchinna* (all land except the capital), *apakraya* (liberation of the territory by imposts), and *paribhūṣaṇa* (by homage). These are the different kinds of alliances entered into by inferior powers.

42 *Ar. Śās.* VIII. 3; Cp. Mallinātha on *Raghu*. 17-56.

43 *Bk. VII.* 3, p. 253. Vol. II. (*Triv. Sans. Series*).

44 Cp. *S.T.R.* 5. 11. 40-45.

Alliances may be temporary (calasandhi) or permanent (sthāvarasandhi).⁴⁵ In other words, the latter is stable and the former is only a time marking device. The following is the list of alliances which may be made. (1) Mitrasandhi (agreement with an ally on definite terms), (2) Hiranyasandhi (for gold), (3) Bhūmisandhi (by acquisition of territory), (4) Karmasandhi (use of army and treasury for common enterprises), (5) Anavasitasandhi (help in colonising an unsettled tract). These are elaborately explained by Kauṭalya.⁴⁶

Dr. Nag takes mitra and hiranyasandhis as one and hence he considers paripaṇitāparipaṇitāpasrṣṭisandhi as the fourth. But we take mitra and hiranyasandhi as two different agreements. The term paripaṇitāparipaṇitāpasrṣṭisandhi is thus explained. An agreement entered into in mutual faith is definite (paripaṇita), and the others are indefinite (apari-panita). We need not enter into the details of each of these. It is enough to say that they were deemed mutually advantageous and profitable in the long run. But it is a deceitful alliance (atisandhi) when one has the opportunity to overreach the other, whether equal (sama) or unequal (viṣama).

The Kauṭaliya proceeds to trace the four different stages in the evolution of a sandhi.⁴⁷ The first is termed akṛtacikīrṣa or peace with no specific end. Here the arts of conciliation and other modes of diplomacy are employed, and the rights of respective powers, equal, inferior and superior, are clearly defined. The second is

45 *Ar. Śās.* VII. ch. 17.

46 *Ibid.*, VII, chh. 9 to 12.

47 *Ar. Śās.* VII, ch. 6.

kṛtāśleṣaṇam or peace with specific terms. In this case the agreement made continues intact, and its provisions are strictly observed, through the medium of common friends. The third is *kṛtāvidūṣaṇam* or violating the peace terms. If it is seen that one party is treacherous and violates the terms of agreement through the agency of traitors and spies, that agreement is broken. The last is *avaśīrṇa kriyā* or the restoration of peace when broken. On a promise to observe the provisions of the treaty strictly, a reconciliation is effected. The restoration of the original compact depends on the peculiar circumstances of the case. For there can be no true reconciliation with those who break the *entente* and then express a wish to join, offering no satisfactory explanation of their previous action. The same holds good with persons of outrageous conduct and those who are unsteady. In formulating these principles, a critical study of the relevant portions of the *Arthaśāstra* shows that its author is lenient to a fault. For he lays down the rule that "whoever annoys the enemy should be accepted and he who does equal harm to both should be politically examined".

Particular care is to be taken in making political compacts. Kauṭalya condemns in unequivocal terms indiscriminate alliances. It is said that a king should not make peace with a minor, an old man, an invalid, one deserted by his kith and kin, a coward, a greedy man, an unbeliever in God, and other fourteen kinds of disqualified men. But these must be fought and conquered.

Vigraha: Though seemingly utilitarian in his attitude, Kauṭalya attaches more value to a diplomatic struggle than to an armed contest which goes by the

name of sangrāmika.⁴⁸ Vighraha is a diplomatic contest, and is but a means to the end, viz., to avoid regular warfare.⁴⁹ There can be no clearer indication of the fact that laws of war and peace had already reached a sufficiently high level in our land in those times. This second line of action or the method of hostilities is, according to the *Śivatattvaratnākara*, of eight kinds.⁵⁰ This indicates the progress of military science in the diplomatic sphere. Kāma Vighraha (a war where love of woman is the cause), Lopaja (a strife born of greed), Bhū-vighraha (a struggle about some piece of territory), Mānasambhava (one due to the wounded sense of honour), Abhaya (fighting for friends and relatives), Icchāja (born of ambition), Madotthita (due to sheer haughtiness and folly), and Ekadravyabhilāṣa (aiming at a particular object). Though various causes contributed to the outbreak of hostilities and though thirst for military renown fired the zeal of the parties, yet proof is not lacking to demonstrate that wars of aggression were few and far between. It is further laid down that a king must avoid sixteen different kinds of war⁵¹ such as those where the result is uncertain, where it is a violation of the existing treaty rights, where it affects the law of international relations, where the strength of the enemy cannot be calculated, where it would result in a tedious and protracted war, and where adverse consequences are certain.

48 *Ibid.* Bk. X.

49 Cp. *Manu*. VII, 107-8, 198-9.

50 Though a late work it is valuable as it transmits the Indian tradition faithfully (5.11.46 f.)

51 *S.T.R.* 5.12.7 ff; *Śukra* IV, 7.250.

In this connexion it is interesting to read a section in the Kauṭaliya entitled 'Yātavyavṛtti.'⁵² Here the discussion centres around the conduct of an assailable power. Here Kauṭalya gives a description of diplomatic struggles carried on between attacking and attackable powers, every one of them trying to get an advantage over the other.⁵³ In the concept of Vigrahaka, there is postponement of actual fighting even after war is declared.⁵⁴ A bargain is effected with little or even no profit, with an eye always to the future permanent gain. This diplomatic war generally came to an end by ceding soldiers, money, or an ally. It was realised that this method was more profitable than that obtained by regular wars.

Āsana: The third method of āsana is loosely interpreted by some scholars as 'neutrality'; but it may mean 'holding a post against an enemy'. It is of ten kinds. These are Svasthāna (to hold one's own place), Upekṣā (indifference), Mārgarodha (blocking canals and channels), Durgasādhya (possession of a fort), Rāṣṭravīkaraṇa (bringing the enemy under control), Ramanīya (to maintain a post pleasantly), Nikaṭāsana (defeating the enemy at a place near his own), Dūramārga (selecting choice sites and owning them), Pralopāsana (stabilising his power in the conquered country) and Parādhīna (by taking refuge with a superior king).

Some aspects of neutrality are implied by this term *āsana*. This opens the discussion on neutrality in

52 VII. 8.

53 See Nag: *op. cit.* ch. iv.

54 Cp. *Manu*, VII, 161.

general. Wheaton has remarked: "According to the laws of war, observed even by the most civilised nations of antiquity, the right of one nation to remain at peace, while other neighbouring nations were engaged in war, was not admitted to exist."⁵⁵ Surely, the political theorist had not in mind the principles of ancient Indian polity, however it may be true of ancient Greece and Rome.⁵⁶ According to Henry Wheaton, a State was either an ally or an enemy. There was no intermediate relation. But a careful study of the working of the Hindu circle of States reveals a number of intermediary relationships. Both the terms, Madhyama and Udāsīna, of which mention has been made, corresponded to what we to-day understand by the neutral king. The Udāsīna's territory was the neutral zone, and here prevailed the laws of peace in actual practice.

Kaṭālyā defines the Madhyama thus: 'He is the king who occupied a territory close to both the conqueror and his immediate enemy in front and who is capable of helping both the kings, whether united or disunited, or of resisting either of them individually.' The Udāsīna is that king 'who is situated beyond the territory of any of the above kings and who is very powerful and capable of helping the enemy, the conqueror, and the Madhyama king together or individually.'⁵⁷ Thus both the Madhyama and the Udāsīna occupied interior zones, apart from diplomatic zones. It is not quite possible to draw a clear line of distinction between them. But still it has

55 *Elements of International Law*, p. 564 (London, 1904).

56 See in this connexion S. V. Viswanatha: *International Law in Ancient India*, ch. X.

57 Bk. VI, ch. ii, Shama Sastri's translation.

been said by some scholars that the Madhyama is more a mediator than a pronounced neutral. In certain cases it is true that the conqueror entered the Madhyama territory, but there is no precedent for the invasion of the Udāsīna kingdom.⁵⁸ The Udāsīna pursued the policy of non-intervention accepted by the diplomatic code of the maṇḍala.⁵⁹

To return to the term *āsana* with which we are at present concerned, it occurs in the Tālgūṇḍa pillar inscription.⁶⁰ According to this epigraph the Kadamba king Kākusthavarman observed the state of *āsana*, and was yet a terror to *sāmantas* and other chieftains. For he possessed the three *śaktis* (*prabhu*, *utsāha* and *mantra*), and hence he had gained a spirit of mastery. In the case of Kākusthavarman, it was a question of armed neutrality. It is reasonable to conjecture that Kauṭalya also envisages a condition of armed neutrality, though these kings strictly remained neutral.⁶¹

Yāna: The next method is *yāna*. Kauṭalya explains *abhyuncayo yānam* and Ganapati Sastri comments *śaktideśakāla*.⁶² It means preparedness to march, having due regard to army, place and time. Different kinds of this *yāna* are distinguished. The chief are Sandhānāja (marching with ally), Pārṣṇirodha (attacking from the rear), Mitravigraha (causing dissension between his ally and the enemy), Dvandva (taking the offensive without the crumbling of the defences), Nirvyāja (marching with an invincible army), Kulya

58 *Ar. Śās.* Bk. VII, ch. 18.

59 *Cp. Śukra* IV, 7.237.

60 *Ep. Ind.* VII, No. 5, l. 13.

61 See Viswanatha: *op. cit.*, p. 196.

62 Vol. II, p. 238 (T. S. S. Series).

(helped by his enemy's vassals) and Śīgragāmini (to pretend to march against one enemy, but suddenly turn towards another).⁶³ An invading king could embark on a march after properly safeguarding his own State, if he felt confident that he would be able to destroy the enemy's works.⁶⁴ In a later section of the Kautaliya the diplomatic utility of the *yāna* is furnished.⁶⁵ If the conqueror finds his enemy beset by troubles, and his subjects disaffected and disunited, and his kingdom ravaged by pestilence and other ills, then he may attack (*vigraha yānam*). He could again resort to *yāna* if he found his allies in front and in the rear of his enemy; also he must get heavily backed by his own subjects. There was the *Sandhaya yānam* which was to lead an expedition against the enemy in front after making a peace with the rear enemy. The third was the *sambhūya-prayānam* or preparedness for march by a confederation of States of different resources, fixing the ratio of the spoils to be taken by them.

Samśraya:⁶⁶ *Samśraya* was the fifth policy under the category of *śādgūṇyam*. It literally means 'support' and in its broader sense means the seeking of the support of allies. This state of affairs emerges when a king feels that he has not the wherewithal to defend his kingdom against a possible attack of the enemy and also feels his inability to weaken otherwise the resources of his enemy. It is the firmness of the prospect and of deterioration moving on to well conceived strategy

63 *S.T.R.*, 5.11.57 ff.

64 *Ar. Śās.* VII, 1.

65 *Ibid.*, VII, 4.

66 *Cp. S.T.R.*, 5.12. 24-29.

through vigorous efforts.⁶⁷ This was provided for by an alliance with a ruler of superior power. There is in the succeeding section an interesting discussion which centres round the nature of alliance. Any alliance with a great power may be tolerated as a stopgap. Permanent arrangements stand condemned; perhaps there was the fear and consequent gravity of strategic setbacks. A weak king should wait for some opportunity by watching the movements of his enemy, and if any such occasion should occur, he must seize it promptly and remove him from his path completely. If he, again, finds himself situated between two strong powers, he must enter into a compact with both of them and slowly set one of them against the other, causing a dissension or division in their ranks. At that time he may put each down separately by secret or covert means. Since no risk can be taken, an alliance must be entered into with him in whom the king has complete confidence and whose friendship is sincere and genuine.

Dvaidībhāva: The sixth method of state policy in respect of foreign relations is *Dvaidībhāva*, which means practising duplicity against one's enemies invariably through fear of them. Dr. Shama Sastri's interpretation, 'making peace with one and waging war with another', is thus subject to correction. Underneath this policy lies an attitude of duplicity.⁶⁸ The *Śrīmūlam commentary*⁶⁹ explains the term as meaning the 'policy of inducing in two enemies confidence by mere speech but behaving inimically in secret.' This policy is to be

67 *Ar. Śās.* VII, 1.

68 *Ar. Śās.* VII, 1; *Kāma.* Ch. 11, 23 ff.

69 Vol. II, p. 238.

adopted only when help is not possible from any other source. Kāmandaka compares the behaviour of such a conquering monarch to the eyes of a cow.⁷⁰

This policy is set forth thus: "The conquering king invokes the aid of his potential enemy. Having combined with a neighbouring king, the conqueror may march against another neighbouring king. Or, if he thinks that 'my enemy will neither capture my rear nor make an alliance with my assailable enemy against whom I am going to march: I shall have double the strength possessed by him, i.e., the enemy suing peace; (my ally) will not only facilitate the collection of my revenue and supplies and put down the internal enemies who are causing me immense trouble, but also punish wild tribes and their followers entrenched in their strongholds, reduce my assailable enemy to a precarious condition or compel him to accept the proffered peace, and having received as much profit as he desires, he will endeavour to reconcile other enemies to me"; then the conqueror may proclaim war against one and make peace with another, and endeavour to get an army for money or money for the supply of an army from among his neighbouring kings.⁷¹ It is rather difficult to make out the exact recommendation in pursuance of the policy of *dvaidhībhāva*.

Five kinds of this policy are distinguished in later literature.⁷² These are Mithyacitta (to dislike one in his heart of hearts but pretend to be friendly towards him),

70 *Kāma*. XI, 23-6; Cf. *Manu*, VII, 160, Comm. *Bār. Sūtra*, V, 5-7; *Pañcatantra Reconstructed*, p. 360.

71 Bk. VII. ch. vii.

72 *S.T.R.*, 5.12.30-41.

Mithya-vacanasañjña (to speak out one thing while having in mind just the opposite), Mithyakaraṇa (doing things as if for his good, but to subvert him in the end), Ubhayavetana (to secretly accept illicit emoluments from the enemy while continuing in his master's service), and Yugmaprābhṛtaka (to pretend to collect men and money for another's expedition, but on the other hand to serve his own purposes).⁷³

SECTION III

INSTRUMENTS OF DIPLOMACY OR THE SEVEN EXPEDIENTS

The application of the six methods of foreign policy was through the four means of *sāma*, *dāna*, *bheda*, and *daṇḍa*, either severally or jointly. According to the *Arthaśāstra* and the epics these are the recognized traditional expedients, which are found only in germ in Vedic literature. The *Purāṇa* literature and later *nīti* works like the *Kāmandakīya* add three more to this fourfold classification.⁷⁴ These are *upekṣa*, *māyā*, and *indraajāla*. This shows unmistakably the slow but sure advance in the art of war and peace, for the influence of diplomacy is felt in both.

Let us now proceed to examine each of these several modes of diplomacy, with regard to their nature and application. The *Matsya Purāṇa* rules that one and the same policy cannot be pursued at all times and towards all persons. In fact, the *Purāṇa* sets forth the theory that in the world the people are either righteous or

73 *S.T.R.*, 5.12. 31 f.

74 See *Matsya P.* ch. 222.2-3. *Kāma.* ch. 18.

unrighteous, and therefore the application of the policy should differ from person to person. For instance, it speaks of a twofold classification of the first diplomatic mode or *sāma*. *Sāma* literally means conciliation, and according to the *Purāṇa* there is the division into *satya sāma* and *asatya sāma*. While the first or *satya sāma* was applied to righteous beings, the *asatya sāma* was used towards the unrighteous. The righteous king was easily reconciled when an earnest appeal was made to his ancient family traditions, and when his action in other spheres was approved. If the same policy was pursued towards the unrighteous, surely it would endanger the conqueror's position. For the wicked king would be led to think of the conqueror's weakness and indulge in more mischief. Towards him is therefore recommended *asatya sāma* which was seemingly a reconciliation but in reality insincere. For in the case of an unrighteous monarch no amount of appeal to family traditions or appreciation of his actions would move him even an inch from his policy.⁷⁵

The implications of this diplomatic means of *sāma* are found buried in the texts of the *Dharmaśāstra* and *Arthaśāstra*. The conquering king is asked to observe this policy of conciliation by the promise of protection of villages and forests, of sheep and cattle, of roads and traffic, of the restoration of the banished and of the runaway.⁷⁶ Kauṭalya recommends the application of this policy towards the conquered king so that the latter may remain loyal.⁷⁷ The *sāma* was again a method to

75 See also *Kāma*. ch. 18, 19 f.

76 Bk. VII, ch. 16.

77 *Ibid.*

bring weaker kings under one's control. If the weak king could not be brought down by a policy of conciliation alone, the other means of *dāna* or gift might be employed. With the passage of time, five kinds of *sāma* were distinguished, as is seen in the *Śivatattvaratnākara*.⁷⁸ Surely in diplomacy it was not a question of stagnation but of progress of ideas.

✓ *Dāna*: The next policy of diplomatic utility was *dāna* or gift. As we have already seen, Kauṭalya recommends the policy of conciliation and of gifts to inferior kings. The policy of gifts was put into operation if the straight method of conciliation did not produce the intended effect. It is said in the *Matsya Purāṇa* that even the gods are brought round through gifts of wealth and other presents.⁷⁹ Gifts were often the temptation—this is true largely to-day also—to win over the recalcitrant and the rebellious.

This policy also met another situation. It may be that sometimes the local chiefs or leaders joined hands with foreigners and rose against the king. In such cases Kauṭalya recommends the policy of *sāma* and *dāna* towards the discontented subjects, so that they might give up their unholy alliance with the aliens. After ensuring peace at home, the conqueror is asked to apply the policy of *bheda* and *daṇḍa* towards the foreigner. In this recommendation and the equally statesmanlike principle that the internal danger must be suppressed first before the external danger should be met, Kauṭalya shows himself a keen politician, and anticipates many of our modern statesmen. This

78 *S.T.R.*, 5, 12, 50 ff.

79 Cp. *Kāma*. ch. 18, 21 f.

recommendation of a practical statesman is supported by the views of law-givers like Manu.⁸⁰ But Manu does not attach much value either to the policy of gifts or the other diplomatic means like *bheda*. For does he not say that Paṇḍits or those who are versed in such technical literature, hold the opinion that from the point of view of progress of the kingdom only *sāma* and *daṇḍa* are the best?⁸¹ Thus the policy of gifts, though effective in several cases, is assigned a secondary place in the *Mānavadharmasūtra*. The *Śivatattvaratnākara* mentions as many as sixteen kinds of *dāna* or gift,⁸² thus improving on the few kinds of gifts mentioned by the *Arthasāstra*. Under the category come political marriage alliances. To cite an instance, Yaugandharāyaṇa, the minister of Udayana, arranged a matrimonial alliance between his king and the sister of the Magadha king Darśaka, which prevented Darśaka's support to the Vatsa country and strengthened Udayana's hands.⁸³ Instances of such marriages can be multiplied.⁸⁴ To mention only a few, we have the marriage alliance of Vākatakas and Guptas, of the Cholas and Cheras, the Cholas and Chālukyas, of the Licchavis and the Guptas. In his discussion on gifts, Kautilya uses the term *abhaya* which is explained in the *Śrīmūlam* commentary as अर्थानि दानं शत्रुभ्यो भयप्रसङ्गे meaning the gift awarded in the shape of wealth to avert the fear caused by the enemy. Other-

80 VII. 107.

81 *Ibid.* 109.82 *S.T.R.*, 5.12.59 ff.83 Note Rājaraṇa's and Rājendra's marriage alliances with the Eastern Chālukya princes, so as to secure their alliance and turn the flank against their hereditary enemies, the Western Chālukyas of Kalyāṇi. See also *Bhāsa*—a study by A. D. Pusalkar, pp. 278-86.84 See *Kāma*. ch. 18, 24-41.

wise the term is inexplicable. Shama Sastri's interpretation as 'absence of fear' does not convey any sense if looked at from the point of view of *dāna*. Kautālya evidently wanted to practise economy both of arms and means.

Bheda: Let us now turn to the third expedient, viz., *bheda*.⁸⁵ To quote again the *Matsya Purāṇa*, this policy of *bheda* or dissension should be pursued towards the unrighteous. It is the policy of 'divide and rule'. A kingdom is apt to be troubled by internal dissensions as well as by external aggression. To launch a policy of either aggression or defence, internal peace is essential. Towards this end, the *Purāṇa* recommends the use of the policy of *bheda*. To conquer an enemy is to create division among his kinsmen or among his subjects and to attack him when they are disunited. Or again, if it were a confederation of the enemy and his allies, the invader must insert the thin end of the wedge among the different members of the confederation, and strike him at the psychological moment, if he should hear of a division in their organised effort. Manu does not attach much value to this policy. According to Kautālya, however, it is an effective weapon to bring even a strong king to his knees. Kautālya definitely rules that by the policy of *bheda* or *daṇḍa* which means the threat of war, a great power may be subdued. According to the *Arthaśāstra*, there were different ways of sowing seeds of dissension. These are by instigating any one of the neighbouring kings, a wild chief, a scion of the enemy's family, or an important prince.⁸⁶ The *Śivatattva-*

85 *Matsya P.*, ch. 223.

86 Bk. VII, ch. 16. See trans.

ratnākara refers to six kinds of *bheda*, and shows, as in others, a distinct advance over the Kauṭalyan tradition. These are *Prāṇahāni* (involving life and death), *Mānabhanga* (where honour is at stake), *Dhanahāni* (appealing to a rich enemy's avariciousness), *Bandhaka* (creating fear of imprisonment in the enemy's ally), *Dārābhilāṣa* (the enemy coveting his ally's wife), and *Arigabhanga* (the enemy's covetousness of his ally's kingdom).⁸⁷

• *Danḍa*: We now pass on to *Danḍa*, the last mode of policy according to the epic tradition. *Danḍa* is not actual punishment or opening of hostilities. It is a diplomatic war, not an armed contest. It is a threat of war, generally applied as a last resort before the actual commencement of fighting. Recourse was had to this policy if the three, *sāma*, *dāna* and *bheda*, had been applied separately or conjointly, and had been found ineffective to achieve the purpose. According to Kauṭalya this policy of *danḍa* should be followed in the case of stronger powers. Sometimes a threat of war might lead to open battle.⁸⁸ This is the use of diplomacy in war. Different modes of *danḍa* are mentioned.⁸⁹ One was to capture the enemy in open fight. The second was to subdue him by resorting to treacherous warfare. The third was to strike him by planning a secret conspiracy. The last was to besiege his fortress to create panic and to capture him during the tumult and confusion caused by the fall of the fortress. If the conquered king behaves better, he should be reinstated.

⁸⁷ *S.T.R.*, 5.12.60 ff.

⁸⁸ See *Kāma*. ch. 18, 41 f.

⁸⁹ *Ar. Śās.* Bk. VII. 16.

Upekṣā: It has been well realised that the application of danḍa cannot be resorted to by all monarchs. How could an inferior power meet a stronger power in open warfare? Even the use of treachery or duplicity on his part would not give him success. In that case what should be the policy to be adopted by the weaker State? The *Matsya Purāṇa* envisages a similar situation and recommends the diplomatic policy of upekṣā. In the midst of superior powers a lesser power should pursue upekṣā or indifference. Already in the Kautāliya, this upekṣā is mentioned, not as a separate policy but as an aspect of the Udāsīna attitude. In other words, Kautālyā asks a neutral power to cultivate the virtue of indifference towards his neighbours, whether they be his allies or foes. The ethics of international law, as the ancient Hindus conceived it, respected this neutral power, and no belligerent was prepared to take notice of this ruler of indifferent attitude.⁹⁰ From the Kautālyan sense of upekṣā, it is a distinct advance in the science of diplomacy to regard upekṣā as one of the expedients, which was the privilege of the weaker power to adopt. Either this power should ever remain in that neutral or indifferent attitude, or it should pursue that until the time when it would feel strong enough to meet the adversary in the open field. There seems to be the further implication that even in case the more powerful State should give trouble unprovoked, it was for the small power to endure it for the time being, and not to retaliate. In such cases patience has its own reward.⁹¹ In another section Kāmandaka speaks of a threefold upekṣā and cites the classical examples of the

90 *Ar. Śās.* VII. 18.91 See *Kāma.* ch. 11. 21 f.

Virāṭa king leaving alone the wicked Kīcaka, and Bhīmasēna leaving uninjured Hiḍimba's brother.⁹²

Māyā: To the above-mentioned diplomatic attitudes, which are accepted by the orthodox *Arthaśāstra* literature, are added *māyā* and *indrajāla*. These two partake, as we shall see, of the character of base diplomacy. For the conquering king would discard the straight path, and try his best to hoodwink the enemy by a recourse to the expedient *māyā*. *Māyā* means illusion and therefore in that sense the invader would put to use all illusory powers to deceive the enemy, and strike him at his weak point. This expedient must be considered as a baser kind of diplomacy. There are different uses of this policy. But there is no reason to doubt that the application of the policy of *māyā* consisted of cunning and intrigue. Surely, this was one of the methods of *daṇḍa* as prescribed by Kauṭalya. Except for the opinion that treacherous warfare could be indulged in, there is no more detail given by him. In invoking the aid of this expedient, it can be noticed that no actual war is implied here, and the success over an adversary was to be achieved by a network of intrigue and counter-intrigue. Some interesting details can, however, be gathered from the *Kāmandakiya Nītisāra*. The conqueror is asked to get himself dressed as a god, or a pillar, and when the enemy comes to worship, to slay him. Other cases of disguise are mentioned. The use of parachutes in the present war perhaps approximates to this principle. The king might visit the enemy in the disguise of a woman,⁹³ of a devil, or an evil spirit, and

⁹² *Ibid.* ch. 18, 57-9.

⁹³ *Devicandraguptam*. See Dr. V. Raghavan, *Journal of the Benares Hindu University*, Vol. II. No. 1. p. 24.

slay him when at close quarters. The *māyā* was twofold, *māṇuṣi* and *amāṇuṣi* or *daiva*. The *Mahābhārata* cites the instance of Kīcaka's death by Bhīmasēna in Draupadī's disguise.⁹⁴

This method and the next, namely *Indrajālā*, must go to demonstrate a noticeable deterioration in the concept of international morality. If it ever existed in actual politics, it must have come into being after the Mauryan epoch, for it is not among the accepted principles of the Kauṭalyan diplomacy.

Indrajāla: The last of the expedients which had the acceptance of the later Nīti writers, in whose works we find traces of deviation of religious principles from things purely secular, was *indrajāla*. A close and careful examination of the uses for which this policy was followed indicates that it partook of the nature and character of *māyā*. This is, in other words, the use of stratagem to win over the enemy. It may also be the use of stratagem in war. It seems to us that these two expedients were the outcome of the growing popularity of the *Atharva Veda Samhitā* and its tenets.⁹⁵ Here we have a number of spells and charms, surely of baser kinds, to achieve one's end. These were by slow degrees increasingly used in wars and in the subjugation of the recalcitrant and the rebellious. Even the Buddhist canonical books, which are supposed to breathe an air of higher ethical atmosphere, countenance these intriguing and superstitious methods. For example, we read several of these things in the section *Brahmajālasutta* of the *Dīgha-*

94 Ch. 18, 53-6.

95 For instance, see Bk. X, 5,

Nikāya.⁹⁶ It reads something like a summary of the important Atharva rites and recommendations.⁹⁷ The following details of this device of indrajāla are mentioned in the *Kāmandakiya*.⁹⁸ 'Alluring the troops of the enemy out of their camps, villages and castles into pastures, a cool-headed king should slay them. Concealing the inefficient portion of the army and with the rest of it supported by the allies, a king should crush the foe, falling upon him even like a lion.'⁹⁹

These last three methods, upekṣā, māyā, indrajāla, were perhaps recognised, to use modern phraseology, as safeguards for minorities against the unscrupulous aggression of superior powers. According to *Kāmandaka*, these three expedients are only aspects of the four main upāyas: sāmā, dāna, bheda and daṇḍa. He says māyā is an aspect of daṇḍa. So also upekṣā and indrajāla are included as aspects of bheda.¹⁰⁰ As these different kinds of expedients have different objectives in view, each must be applied according to circumstances. If some cases require a combination of one or two methods, that must be also resorted to. In the course of the application of dāna, sāmā may also be used. In the course of sāmā and bheda, dāna may be used. The section of the *Kāmandakiya* dealing with this subject is concluded thus:

96 Vol. I, pp. 146; See also B. C. Law: *A History of Pali Literature*, pp. 81 f; Cp. Winternitz: *A History of Indian Literature*, Vol. II, p. 36.

97 Cp. *A.V.* Bk. X, 5.

98 *Kāma*. Ch. 18. 60-61.

99 Dutt's trans.

100 See the Commentary of Śankarārya on st. 61.

‘ That diplomat who uses these different modes of policy, with due regard to place, time and resources, against the enemy and his own force, will attain success, and he who does not make use of them in his domestic and foreign policy will be but like a blind man.’¹⁰¹ By employing these seven expedients based on the sixfold policy, a conquering king, it is said, earns the much coveted title of Sārvabhauma.¹⁰²

SECTION IV

INTERNATIONAL RELATIONS

We now proceed to refer to some of the diplomatic relations which existed between India and the outer world. The picture presented in the epics and the *Arthasāstra* literature seems to be confined to the four corners of this Bharatakhanda. It is difficult to say whether India had any international relations with the outside world. The intercourse as envisaged in the literature, shows relations to be more commercial than political in character. But political relations with foreign countries became a matter of importance from the epoch of Chandragupta Maurya, if not earlier.

Strabo quotes Megasthenes and says that the Indians were not engaged in wars with foreigners outside India nor was their country invaded by any foreign power except by Hercules and Dionysius and lately by the Macedonians. There is documentary evidence to indicate the naval expedition led by Darius about 517 B.C. and the Persian conquest of the North-west. But there were

101 *Ibid.* 65.

102 *S.T.R.*, 5.12.123.

friendly relations of Chandragupta with Seleukos Nikator, of Bindusāra with Antiochus, of Aśoka and Samudragupta with Ceylon, of Pulakeśi with Persians, of Harṣa with Nepal and China, of the Chōlas with Śrī Vijaya. And when the conception of the State grew into an Imperial one, and when the Indian Empire became a separate entity, the problem of the North-West Frontier, through which entered all the great invading hosts of India, engaged the emperor's attention. The frontier, says Lord Ronaldshay. 'possesses the possibilities of complications which cannot arise in a simple frontier consisting of a single boundary line more or less demarcated between one state and another, for it offers the option of two alternative policies. It is either absorption by the paramount power or non-interference.' In this the Hindu kings succeeded more by diplomacy than by conquest. We also know from authentic history how Chandragupta Maurya was able to create a scientific frontier which is still a problem for the British Government in India for wellnigh over a century.

A writer in the *Cambridge History of India* remarks: 'It is in foreign policy that we find the culmination of the Indian genius for systematic exposition, the principles being those of Machiavelli. Policy has not large aims: the mainspring is the rivalry of the kings and the much applauded desire for glory and Imperial rule'. These statements are rather misleading. In the first place, it was not Machiavellian as has been already pointed out. Secondly, the idea that the policy was imbued not with larger aims but only with rivalry and glory, cannot be accepted. The ideal was not mundane. It was something higher and nobler and consequently spiritual. Rapson says: "It was always regarded as a

legitimate object of the ambition of every king to aim at the position of Cakravartin or of supreme monarch." This ambition was legitimate and had no narrow outlook about it. It was not the exclusive privilege of this or that sovereign, but a fruit to be sought after by every one of the monarchs comprising the maṇḍala. If the king is not actuated by this idea, he falls short of an ideal king according to the Hindu Rājadharmā. Samudragupta, for instance, was full of this ideal. His conquests were not waged for the sake of mere territorial ambition, but to attain the larger end, namely, the realisation of Indrahood. As has been already said, Heaven is the ultimate goal and its attainment necessitates the conquest of this earth by the Kṣatriya. In a word, conquest is a means to a greater end, namely, happiness and glory in Heaven.

CHAPTER IX DIPLOMATIC AGENTS

SECTION I

THE PLACE AND FUNCTION OF AMBASSADORS

The institution of ambassadors is not a peculiar feature of modern times. In the ancient diplomatic code of the Hindus it occupied an honoured place. Ambassadors in general occupied a very high and enviable position as befitting their status and function. From the earliest literary records which include the huge mass of Vedic literature, the *dūta* figures prominently. In the concept of the Vedic pantheon, Agni is the accredited messenger of the gods. He is the Devadūta, as happily rendered by Iḷanko Aḍigaḷ in his immortal work, the *Śilappadikāram*. Commencing with the *R̥g Veda Samhitā*, it is noticed that the two diplomatic agents *dūta* and *cāra* were in existence.¹ In the *Taittirīya Samhitā*² there is the term *prahita* as distinct from *dūta* and meaning an envoy. On the authority of the celebrated commentator Sāyaṇa, the *dūta* is one skilled in getting correct information as to the strength and position of the enemy's forces.³ *Prahita* is explained as an envoy sent by his master.⁴ In that sense again the *Atharva Veda Samhitā* uses these terms.

1 I. 12.1.

2 IV. 5.7.

3 परसेन्यदुतान्तज्ञापनकुशलः ।

4 क्षामिना प्रेतपुरवः ।

Thus it is seen that the institution of ambassadors is a very ancient one. The *Mānavadharmasāstra*⁵ mentions the qualifications of this important official. He should belong to a noble family, be intelligent, honest, industrious and versed in all sciences, and possess the faculty of reading others' thoughts and feelings from their appearance and behaviour. He must also have an attractive personality and be dexterous, loyal, courageous and capable of discerning things in their true spirit according to time and place; and above all, he must possess a good voice and fine delivery. According to Kauṭalya,⁶ ambassadors may be divided into three classes, *nirṣṭārtha*, *parimitārtha* and *śāsanahara*. The first class, who had many miscellaneous functions to perform, must be fully qualified, that is, they must have all the qualifications of ministers. According to Kauṭalya, the minister should be of a good family, fully versed in all sciences, capable of self-sacrifice, highly devoted to his state and sovereign, pure-hearted and wise. The second class of envoys are those who are entrusted with a single definite mission, and hence men possessing less of the above qualifications would suffice. The *śāsanaharas* or the third class of envoys were mere carriers of the royal writs, and for this much less qualified men would generally be chosen.

It is interesting to find a parallel to this in the *Rāmāyaṇa*,⁷ where also three kinds of envoys are men-

5 VII. 63-64.

6 *Ar. Śās.*, I, 16.

7 *Yuddha*, 1, 8-10.

यो हि भूयो नियुक्तः सन्मन्त्राकर्मणि दुष्करे ।

कुर्यात्तदनुरागेण तमाहुः पुरुषोत्तमम् ॥

tioned. He who performs even an undesirable and insurmountable task, out of devotion and love, is a *puruṣottama*, the best among men. Entrusted with a certain mission, he who does not act so as to enlist the love and affection of the king but does it in his own way, is a *madhyamanara*, the middling person; and that man who, though ordained, does not carry it out in the proper manner, is a *puruṣādhama*, the lowest among men.

Agnipurāṇa,⁸ uses the very words of Kauṭalya in describing the three classes of envoys. These are said to be some general rules communicated to Lakṣmaṇa by Rāma. According to the latter, diplomacy is better than the expedient of war. This could be effected by special envoys sent for the purpose, while in the enemy's kingdom the ambassador must speak highly of his king as well as of his enemy and thus ascertain the true force of public opinion in the land. An ambassador is thus but an open spy. He can assume the role of a merchant, a physician, or some other person to get at the truth. A king must take up arms if his embassy should prove unsuccessful, as Yudhiṣṭhira did after Kṛṣṇa's embassy.

The *Kāmandakīnīti* has a special section on the qualifications and duties of ambassadors. Here also the threefold classification of envoys is retained as in the *Kauṭaliya* and in the *Agnipurāṇa*. The ambassador must survey the strength of the *Antapālas* and the

यो नियुक्तः परं कार्यं न कुर्यान्नृपतेः प्रियम् ।

भृत्यो युक्तः समर्थश्च तमाहुर्मध्यमे नरम् ॥

नियुक्तो नृपतेः कार्यं न कुर्याद्यः समाहितः ।

भृत्यो युक्तः समर्थश्च तमाहुः पुरुषाधमम् ॥

Āṭavika princes who lie on the way to the enemy's kingdom. He should get a true idea of the extent of the enemy's army, treasury, forts, and weak spots, himself playing the part of a cāra or employing cāras for the purpose. He must sleep alone and in a lonely place. According to the *Śukranītisāra*⁹ an ambassador is one of the ten principal ministers. Only one who is capable of reading the signs, demeanour, and behaviour of the adversary, skilled in all arts and sciences, eloquent and devoid of fear on any account, should be appointed to discharge this duty. As the king's representative he had to discharge his duties loyally though they be undesirable and unfruitful.

✓Bhīṣma mentions seven qualifications as essential in an ambassador.¹⁰ He should come of a noble line, belong to a high family, be skilful, eloquent of speech, true in delivering the mission, and of excellent memory. A king must never sentence or subject an ambassador to capital punishment. If he does so, he sinks into oblivion and he is subject to the tortures of the hell together with his retinue of responsible officers. It is further said that any officer who kills an ambassador that delivers his message according to the very letter and spirit of his instructions, brings down untold sin not only on himself but even on his deceased ancestors. Such was the moral force at the back of this very important institution.

The question now arises: what action did the State take in such cases? South Indian epigraphy records the incident of the ambassador of the great Chōḷa monarch, Rājārāja (acc. A.D. 985) who was insulted by a con-

9 II. 72, 87-88.

10 *Śānti*, 85, 26-28. *Rāma*. II. 100.35: v. 41. 5-6.

federacy of eighteen princes, in retaliation for which Rājarāja invaded Malaināḍu and killed those eighteen princes.¹¹

The duties of an ambassador, then, were many and varied. The lawgiver, Manu,¹² lays down these explicit functions. First, on him rests the ultimate declaration of war or peace.¹³ Secondly, he is to make or break alliances. Again, he is to sever the friendship of those who are not favourably disposed to his country and secure alliance with those who are, for all practical purposes, friendly if the conditions and circumstances so demand. He is further to ascertain the nature and scope of the enemy's strength, his allies, followers, and his enemies. Lastly, he must so play his part in foreign lands as not to imperil his personal security. The very same duties are laid down by Kauṭalya¹⁴ also, which go to show that he is a faithful follower of the Dharmaśāstras. According to Kauṭalya the envoy should endeavour to secure the friendship of the enemy's officers, study his military strength, forts, arsenals, army, and all his weak as well as favourable points. He must make an accurate survey of the whole ground leading to the enemy's kingdom, then and there, marking the best vantage grounds for encampment, for operations, for retreat, and for the storage of provisions. Only with previous permission should an ambassador enter the capital city of his enemy. He must deliver the message

11 *Ind. Ant.*, Vol. XXII, p. 142.

12 VII, 65, 68.

13 Cp. the action of the Roman ambassador at Tarentum on the eve of the Pyrrhic War.

14 *Ar. Śās.*, I. 16.

exactly as entrusted to him even at the risk of his life, carefully observing at the same time how and in what spirit the enemy receives it.

✓ There are other salutary regulations touching the treatment that should be meted out to an envoy. He must be respectfully welcomed, and accorded a seat of honour near the throne. Enquiries as to the health of the enemy king, the ambassador's master, as well as of his friends should next be made. The ambassador's message should be patiently heard and he must be sent back with a suitable reply. Above all, the mission must be closed with satisfaction. ✓ The envoy should not stay longer than necessary in the enemy's country and while there, he must not touch women or liquor and must sleep alone and in a lonely apartment if possible. He must further put up with any indignity offered. This is not all. While staying in the enemy's court, he must mix freely with all classes of people in the realm and thus try to understand the degree of loyalty of the subjects. If it is not possible to gather reliable information by open means, then an ambassador may put on various disguises like those of an ascetic, a merchant, a disciple, a physician, a beggar or an insane person and thus try to get correct information regarding the people, the army and the kingdom. These are really speaking the functions of a spy.

As we have already remarked, the envoy was not permitted to stay a long time. Having obtained whatever information he could gather, he must ask for permission to return.¹⁵ If detained against his will, he should try to find out the various possible motives that might have induced the adversary to take that course, whether for

collecting an army or inciting a rebellion or making an alliance with others. But he might demand, as of right, a speedy departure for himself; and if the circumstances are such that any further stay might imperil his personal safety, then he might even leave the kingdom without permission. Another important regulation relating to ambassadors already referred to was that they should not be put to death on any account to whatever caste they belonged. From this it is evident that members of all communities were eligible to this office, and that it was not the exclusive monopoly of a particular caste.

To conclude, delivering the message entrusted to him, respecting treaties, issuing ultimatums, getting allies, resorting to intrigue when necessary, sowing dissensions among the enemy's friends and associates, carrying away by stealth or otherwise the secret forces, relatives and wealth of the enemy, and doing the work of a spy occasionally—these in brief, were the functions of a well-versed and devoutly loyal ambassador.

It would not be out of place here to give a few illustrations from our literature. In the *Rāmāyaṇa*¹⁶ Hanumān is sent by Sugrīva at the request of Rāma in search of Sītā. In the course of his fruitless wanderings he gets a hint from Sampāti, the king of vultures, of the whereabouts of Sītā. Thereupon Hanumān crosses the ocean to Laṅkā and on the way defeats a few of the formidable Rākṣasas apparently appointed by Rāvaṇa to guard the outskirts of his capital. Defeating them all and securing permission from every one of them, Hanumān reaches the fortress of Laṅkā. Here again

¹⁶ See the last chapters of Kiṣkindha and the opening chapters of the Sundara Kāṇḍa.

he has an encounter with the guardian deity of the city. The latter is defeated by his prowess and she willingly grants him permission to enter the citadel. Thus we may take it that Hanumān entered the capital of Rāvaṇa with the permission of those who had the power to grant it.

There he acted exceedingly well the part of a cāra or spy and got all the information required. His mission was, first and foremost, to find out the place where Sītā was confined, and for this purpose he assumed various disguises. When he became weary of the search he thought of assuming the guise of a beggar, an insane person or an ascetic. Soon afterwards he beheld Sītā sitting under an *aśoka* tree distressed and vexed, her eyes full of tears. Then he appeared before her as a Brahman disciple and introduced himself as a messenger from Rāma,¹⁷ assured her of his safety, and enquired after hers. She did not at first believe him. Soon he convinced her of his identity, delivered his message, received her message to Rāma, and took leave of her. In this case it was not a message to an enemy but to a friend or rather a loving partner.

But his message to Rāvaṇa is of historical value. Hanumān was no ordinary being. He was the chief councillor of King Sugrīva, and versed in all arts and sciences. Truly did Jānakī remark¹⁸ that he was endowed with prowess, intelligence and skill of the highest order. He had all the qualifications of an ambassador and even more. After seeing Sītā, he contemplated visiting Rāvaṇa also, the king of Laṅkā, in

17 *Sundara*. 34.2.

18 *Ibid.*, 34.7.

person as the envoy of his brother sovereign Sugrīva of Kiṣkindhā, with a view to secure the release of Sītā through open negotiation. But it appeared to him well-nigh impossible to get access to him by any fair or friendly means. So he began to destroy the favourite flower and fruit gardens of Rāvaṇa with the result that the brave Rākṣasas who came to attack him were all slain. After this, royal princes were sent against him, and it was Indrajit who ultimately succeeded in vanquishing him and carrying him as a captive before his father, the king of the Rākṣasas. But Hanumān was not in the least daunted. He delivered the message boldly and fearlessly even at the risk of his life. He represented himself as the envoy of Sugrīva. But Rāvaṇa turned red with anger and ordered his execution, whereat Vibhīṣaṇa rose and explained the Rājadharmā regarding the treatment to be accorded to envoys in general. First of all, an envoy should not be punished with death at all.¹⁹ That is against all international morality. Such a course would be censured by the world at large. But when questioned about the forms of punishment to be inflicted on guilty or obnoxious envoys, Vibhīṣaṇa mentioned mutilation of certain limbs, beating and other forms of chastisement. Thereupon Rāvaṇa ordered Hanumān's tail to be burnt. But Hanumān with undaunted courage set the whole city on fire with his lighted tail. Once again taking leave of Jānakī, but without the permission of the Lord of Lankā, lest it should imperil his life, he returned to the other side of the sea and rejoined his brother-monkeys and

19 *Ibid.*, 52, 6-7, 13. VI. 20.16-18.

filled their ears with the glad tidings. During his stay in Lankā, Hanumān took full stock of the situation, surveyed the citadel in all its aspects, and was convinced that the four expedients of *sāma*, *dāna*, *bheda*, and *daṇḍa* would be of no avail against the great and mighty Rāvaṇeśvara. He acquainted himself with the strength of his army, of his friends and enemies, of the forts and fortresses, and other vantage grounds for camps and battlefields, if such should be necessary in the future. Burning the city, taking cognisance of the future events and leaving the place without any formal permission, all these go to show that he had even issued an ultimatum for war.

The practice of sending ambassadors to declare war is seen in the *Viṣṇupurāṇa*²⁰ where Vāsudeva, the king of Puṇḍra, claimed a divine status for himself and sent an ambassador to Kṛṣṇa, the king of Dvārakā. The message delivered was: 'Leave off your cakra, Oh foolish person, and come and accord me your homage and I shall forgive you and grant you means of subsistence.' The Lord laughed and sent a fitting reply: 'I shall even to-morrow go with my cakra and yield it to you'. Mounting Garuḍa, Kṛṣṇa set out against Puṇḍraka, and the king of Puṇḍra helped by the ruler of Kāśī came to meet him.

Again, in the *Mārkaṇḍeya Purāṇa*,²¹ when Alarka, the fourth son of Madālasa, was reigning, his elder brother Subāhu wished to usurp the throne. So he sought Kāśīrāja's help and sent an ultimatum through an envoy. It was 'Submit or fight.' As befitted a

20 V. 34.

21 Ch. 37.

Kṣatriya, Alarka offered battle and being defeated fled for life. That this was also a Tamil custom is seen from the fact that just on the eve of his expedition to the Ganges, Ceraṅ Senguṭṭuvan asked his minister to send envoys to the northern kings to the effect that unless they were prepared to recognise his suzerainty, he would meet them in open battle.²²

Another instance of this rôle of a messenger is found in the *Mārkaṇḍeya Purāṇa*,²³ where Śumbha and Niśumbha, the two great Asuras, completely defeated the gods. Though a legend, it gives us an idea prevalent in ancient times. There was only the goddess Durgā left unconquered. So Śumbha sent a messenger, Sugrīva by name, to the goddess with the message: "I want you here quickly. So do come without delay." The envoy reached her abode among the mountains and delivered the message as instructed. The Devī calmly received it and sent the reply that he who could conquer her in battle would be her husband, and hence Śumbha was welcome to fight with her. Enraged at the message, Śumbha sent able generals to drag her by the hair to his abode. They were all completely destroyed when Durgā sent the celestial messenger Śiva with the ultimatum for war. Thereupon Śumbha marched with his legions armed with 86 different weapons and eighty-four different clubs, all of whom she destroyed utterly.

Yet another instance is that after arriving on the shores of Lankā,²⁴ Rāma sent Angada as an envoy to

22 *Śīlap.* ch. 26.

23 Ch. 85, 87.

24 *Agni P.*, Ch. 10.

Rāvaṇa with the message: "Give up Sītā or fight". Rāvaṇa replied that he would fight. Then Rāma with all his monkey forces marched towards the citadel.

To cite another instance Drupada sent his Purohita, a well-versed Brahman, as an ambassador to the court of Dhṛtarāṣṭra on the eve of the struggle to avert war on behalf of the Pāṇḍavas.²⁵ Having arrived at Hastināpura, he was accorded a hearty welcome by Dhṛtarāṣṭra, Bhīṣma and Vidura. Enquiries about the health of the king and the chief officers of the state were then made. Then he delivered his message, which was patiently heard. Bhīṣma replied that Duryodhana was not willing to yield even one inch of territory but was prepared to lose the whole empire in battle if it should so chance. Then he went back. After this Sañjaya was commissioned by Dhṛtarāṣṭra to go to the Pāṇḍavas, enquire after their health, and say whatever he thought fit on the occasion. Sañjaya spoke of the horrors and sins of war and desired Yudhiṣṭhira to make peace. As an ambassador he gave out his message as was instructed. Kṛṣṇa answered that peace was good, but war was the duty of the Kṣatriyas. 'For the purpose of slaying robbers, Indra had created the bow, the weapon, and also the armour. Dhṛtarāṣṭra with his sons had robbed the sons of Pāṇḍu of their just and lawful inheritance, and hence as robbers they must be dealt with. So let the Kurus be told that the Pāṇḍavas, though ready to fight, are still in peace.'

Having effected a rather speedy settlement and permitted by Yudhiṣṭhira, Sañjaya, the pure-souled and of humane and virtuous speech, returned with the

message to Duryodhana.²⁶ 'Cede Indraprastha or give battle.' Then with Dhṛtarāṣṭra's permission he entered the palace and unfolded all that had taken place. Questioned as to the vulnerable and non-vulnerable points of the Pāṇḍava army, Sañjaya spoke of their superiority in possessing Kṛṣṇa on their side with his disc and his power of producing illusion.²⁷

Yet another striking illustration is also found in the *Mahābhārata*. Instructed by Yudhiṣṭhira, Bhīma and Arjuna and Nakula to act in such a way that there might be peace with the enemy and to do such other things as he considered proper and even fruitful to the Kurus, Kṛṣṇa set out as an ambassador. But Sahadēva and Sātyaki preferred war, for nothing but killing Duryodhana would bring them peace of mind. Draupadī sounded the same note. Then Kṛṣṇa started for Indraprastha and in the meantime Duryodhana proposed to make him captive while there. This course Dhṛtarāṣṭra opposed, saying that he was an ambassador and therefore it was improper to make him captive. Kṛṣṇa arrived and was duly honoured. He spoke the words of a friend wishing for peace. The terms of the message amounted to asking the Kurus to give up half the kingdom or, if that was not possible, to cede five villages, or to fight in the last resort. Duryodhana would not agree in spite of good advice from his elders, and offered only war. Taking leave of all of them Kṛṣṇa speedily returned to Upaplavya where the Pāṇḍavas heard him and prepared for the battle.

A reference to the early Tamil Śāṅgam works shows

26 *Ibid.*, 30, 3-6; 49.

27 *Ibid.*, 32, 67-68.

that ambassadors played a significant part also in the Tamil land. The earliest work extant, the *Tolkūppiyam*,²⁸ refers to the *dūtas*, and, what is more interesting, the *sūtra* implies that Brahmans were generally sent on this errand. The *Kural* has a chapter on the qualifications and functions of an ambassador.²⁹ He is a true ambassador who has a commanding personality and pleasing manners, comes of a noble family and is faithful, wise, versed in legal and political literature, and persuasive in speech. He should be unimpeachable in character and rise above all temptations. He should speak out unmindful even of personal safety. A study of the *Śilappadikāram* shows that king Senguṭṭuvan had a big establishment of *dūtas*, the chief of whom were Sañjaya and Nila.³⁰

Epigraphic testimony: Inscription No. 30 of King Virarājendra Chola bears ample and eloquent testimony to this practice in vogue among the South Indian kings in medieval times. King Virarājendra dispatched a letter to the Chālukya prince through a messenger with an ultimatum for war. Probably this messenger came in the third category of Kautalya's and Agnipurāṇa's classification of envoys. The letter had this preamble: 'He who does not come to the appointed Kūḍal through fear, shall be no king but a liar and a disgrace in war.' This was delivered to the messenger who carried it and handed to the Chālukya king. The Chālukya king resented the action of the Chola. Though the latter set out for the

28 *Poruḷ*, 25.

29 Ch. 69.

30 Ch. 26.

battle-field, the Chālukya did not turn up even a month after the appointed time but fled in fear.

Thus there is both literary and inscriptional evidence to show what a useful part was played by the ambassador in ancient Indian diplomacy and warfare.

SECTION II

ESPIONAGE IN WAR

Modern international law has classified diplomatic agents under different heads, and has accepted the principle of stationing permanent ambassadors in foreign states. Though ancient India had developed a theory of international law and ethics, its ambassadors were not permanent agents in foreign courts. They were sent on a special mission and were expected to return after having carried out their mission. In fact, it was prescribed, as we have seen, that the ambassador should not be allowed to stay long in those courts. Important as the ambassadorial system was, espionage was even more valued. Looked at from the point of view of diplomacy, the institution of spies had a greater utility, as the king could take action on the report of the spies. At the outset it may be remarked that spies were engaged to look after the home officials, including those of the royal household as well as to report on the doings in the enemy kingdoms. It is with the latter class of spies who were sent to foreign countries to gather information about the movements of the enemy and his army, that we are at present concerned.

To recall what we have already said, spies are mentioned in the *R̥g Vēda Samhitā*. It is said that

Varuna had a number of spies,³¹ as well as Agni.³² These spies looked out far and wide. They went about in different directions. They were true to their duties, and were never confused in carrying out their task.³³ Their policy was clearly defined. Only men of wisdom and purity were sent on this errand,³⁴ thus suggesting that they should be persons above corruption and temptation of any sort.

Such details may indicate the high development of the science of diplomacy in ancient India. As was noticed in the last section, the term *prahita* stands for the spy in the *Taittirīya Samhitā*, if we are to interpret it in the light of the commentary of Sāyaṇa.³⁵ But when we come to the epoch of the composition of the *Atharva Veda*, we have additional details of these officials in secret service. Here again,³⁶ we meet with the spies attached to the exalted office of Varuna. They were said to possess a thousand eyes, implying, of course, that they were ever vigilant and watchful. It is further mentioned that they looked down on the earth from the sky, meaning that no direction was left uninspected by them. They moved here and there, and this was, we may suppose, for gathering correct information and reporting it to their master. All important gods had their own spies. For instance, spies were attached to Mitra.³⁷

In the epics, again, there is a fund of infor-

³¹ I. 24.13.

³² IV. 4.3; A.V. VI. 4.3.

³³ VI. 67.5; VIII. 87.3.

³⁴ VII. 67.3.

³⁵ IV. 7.1.

³⁶ IV. 16.4.

³⁷ A. V. VIII. 61.3. Soma too had spies. *Ibid.* IX. 73.4. See Macdonell, *Vedic Mythology*, pp. 23-24.

mation about these officials. In the *Mahābhārata*³⁸ it is said that they frequented all places and sent up regular reports. When the Pāṇḍavas were living in the country of King Virāṭa, Duryodhana sent able spies in search of them. Duśśāsana offered advance pay to these secret emissaries.³⁹ An illustration may also be cited from the *Rāmāyaṇa*.⁴⁰ Rāvaṇa sent two of his ministers Śuka and Sāraṇa to report from time to time on the strength and the movements of Rāma's forces (*Parijñātum balam sarvam*). They entered the Vānara host in the disguise of monkeys. Soon they were found out and Rāma sent an ultimatum through them to their master. According to the great epic, men able to disguise themselves as idiots, and blind and deaf men, were appointed as spies. They should have been previously engaged in other services and their conduct testified to. Able to endure fatigue and thirst, they should be men of intelligence, and he was a wise king who employed these spies in such a way that they might not recognise one another. The king should also endeavour to get at the knowledge of foreign spies frequenting his kingdom in its parks, learned assemblies, courts, places of amusement, etc.⁴¹ Elsewhere it is said⁴² that having spies for his eyes, the king should learn all the acts and intentions of his foes, friends and neutrals.⁴³

The king must not take action on the report sub-

38 *Śānti.*, 69. 8-12; 86.20-21.

39 *Virāṭa.*, chh. 25 and 26.

40 *Yuddha.*, ch. 25 (whole).

41 *Virāṭa.*, 8, 13.

42 *Ādi.*, ch. 142, 75-77; *Kāma.*, 13.31.

43 LXXXVI. 20.21; *Udyoga.*, 33.34.

mitted by a single spy. If the information received from three different sources, independent of one another, is found to tally, then action could be taken. This ruling of the *Rāmāyaṇa*⁴⁴ is followed by the *Arthaśāstra*,⁴⁵ and further supported by the prescription of the *Kuṛaḷ*.⁴⁶ It bears testimony to the care and attention paid to the strategic policy in the ancient Indian State.

It is only when we come to the period of the Kauṭaliya that we find a regular secret service department as a permanent feature. Mention of a similar institution is met with in the works of Bhāsa, who is now said to have lived in the fifth century B.C. According to this dramatist, these spies were the king's eyes,⁴⁷ who watched the movements of enemies and those of the king's subjects and aliens. They themselves moved about in the guise of madmen, mendicants, etc. Vatsarāja was freed from captivity through the secret service.⁴⁸

In the *Arthaśāstra* there are four important chapters on this institution.⁴⁹ Spies in the guise of a fraudulent disciple, a recluse, a householder, a merchant, an ascetic, a *satri*, a firebrand, a poisoner, and a mendicant woman were employed by the king. Being encouraged with honour and presents of money, they were asked to swear their loyalty to the king and his council; for it was the minister that set them on their mission. Intelligent cultivators fallen from their condi-

44 *Ayodhyā*, 100, 36.

45 Bk. I, ch. 11.

46 Ch. 59.

47 A.V., 1.12.

48 See the *Journal of the Bombay University*, II, pt. vi, p. 196.

49 Bk. I, ch. 11; See also translation.

tion were employed as house-holder spies, and traders fallen from their professions as merchant spies. The *satris* were orphans maintained by the State, while the firebrands were those who confronted wild animals in fight to earn their livelihood. Brahman widows were generally the *parivrājaka* spies, though women of other castes were enlisted in this service. ✓ Thus Kauṭalya distinguishes five institutes of espionage⁵⁰ (*samsthas*), the members of which were sent over the country by the king to ascertain the purity of his own officials and also of the enemy.

These different spies were attached to one of the five institutes, and they sent information by making use of signs or writing (*samjñā lipi*) to the officers stationed in their respective institutes. Intelligence was also conveyed through cipher writing (*gūḍhalekhya*).⁵¹ ✓ Some spies were sent to foreign kingdoms to secure employment, and these were paid from the Home Department so that they would secretly furnish first-hand information regarding the enemy. These officials

50 It is interesting here to compare similar institutions in ancient China. L. Giles has translated the Sun Tzu or the Art of War from the Chinese, and this is very valuable to students of Chinese history. Here also five classes of spies are distinguished. These are local spies, inward spies, converted spies, doomed spies and surviving spies. Local spies are those recruited from the local District. The officials of the enemy were used as inward spies. The enemy's spies who were won over to the conqueror's side were converted spies. Doomed spies were those who gave false report to the enemy about his own state in order to deceive the latter. Surviving spies were those who got news from the enemy's camp. The functions and qualifications mentioned are quite in agreement with the *Kauṭalya* (pp. 164 ff), (London, 1910).

51 *Ar. Śās.*, Bk. I. 16.

therefore went by the name of *ubhayavelanas*. One other business of these spies was also to discover the spies set by foreign kings. Spies under the guise of astrologers and readers of omens and auguries were set in motion to ascertain the relationship of the local people with foreign kings. By this means the king was asked to protect himself against the intrigues of foreign chiefs.

The *Kuraḷ* devotes two interesting chapters to the institution of spies.⁵² These are entitled *Terindu teḷital தெரிந்து தெளிதல்* and *Terindu vinaiyādal தெரிந்து வினையாடல்*. The injunctions follow in the main those formulated by the *Arthaśūtra*, thus showing its indebtedness to the *Kauṭaliya*. The *veṇba* 501 follows *verbatim* the *Arthaśūtra* when it says:

अमात्यान् उक्त्वाभिः शोचयेत् । धर्मोपधा, अर्थोपधा, कामोपधा, भयोपधा ॥

The *Kuraḷ veṇba* runs as follows: 'Having put one to the fourfold test, dharma, wealth, pleasure and fear, a selection must be made'. The same idea is contained in another *Kuraḷ veṇba* 510. This means that before the actual appointments were made, each officer was put to four kinds of rigid tests, i.e., temptations of virtue, wealth, lust and fear. Those who had come out successful from the *dharmopadha* were appointed as judges and commissioners, from the *arthopadha* as treasurers and collectors-general, from the *kāmapadha* as guardians of frontiers, of the harem and amusement parks, from the *bhayopadha* as officers of the royal household. Those who had satisfied all the four tests were chosen as ministers. If one reads these recommendations with the *Kuraḷ veṇbas* 518 and 520, one is astonished at their

striking similarity.⁵³ According to the *Kuṛaḷ*, again, the two eyes of the king are the spies and a knowledge of the *Dharmaśāstras*.⁵⁴ These confirm our conclusion that Tiruvalluvar was a follower of the Kauṭaliya school and based his political theories on the Arthaśāstra texts, especially the *Arthaśāstra* of Kauṭalya.

In a later book Kauṭalya furnishes more details regarding their functions.

✓ 1. Spies attending upon the prince kept as a hostage might break the agreement of peace.⁵⁵

2. They might bring about the death of a fortified enemy by means of weapons, poison or other things. This was generally done by firebrand (tikṣṇa) spies.⁵⁶ It was resorted to in the case of obstinate enemies and enemies of a mean character.⁵⁷

✓ 3. They helped in sowing seeds of dissension. Spies in different disguises, particularly as astrologers and sooth-sayers, gave publicity to their king's association with gods and his miraculous powers. They must further convert the people of the enemy by speaking highly of their king's righteous rule and parental care towards every one of his subjects. They bribed otherwise unconvinced persons by supply of money and grain, and created a split between the enemy king and his subjects.⁵⁸

53 See Dikshitar: *Studies in Tamil Literature and History*, pp. 158-160; C. S. Srinivasachari: *The Political Ideas of the Kuṛaḷ*, (I.H.Q., 1927).

54 Ch. 59.

55 Bk. VII, ch. 17.

56 Cf. *Rājatarangini*, VIII. 2200: If caught spies were blinded.

57 Bk. IX, vi.

58 Bk. XIII, ch. 1.

4. They were again employed to sow dissension among a corporation of petty kings and warriors. Spies found out, by access to these, the jealousy, hatred, and other misunderstanding existing between them, and planned dissensions saying, 'This chief desired you.'⁵⁹

5. Spies again might lure an enemy, in the guise of ascetics of miraculous powers or by disguising themselves as fire-god and Nāga gods. Reports were taken to the enemy king about them, and persuading him to visit the place he might be slain.⁶⁰

6. They carried on other intrigues by deluding the enemy king within the sight of a beautiful elephant if he was fond of elephants, with lovely women if he was fond of women, with a hidden treasure if he was fond of wealth, and by striking him down on such occasions.⁶¹

✓ 7. In the course of siege operations, spies disguised as hunters stood at the gate of a besieged fortress and pretended to sell meat, thus making friends with the sentinels stationed at the gate. Winning their confidence and diverting their attention, they caused the gates to be opened, and when that was done, the spies struck the enemy with the help of men secretly kept ready.⁶²

8. In the case of a powerful enemy, spies in the service of the enemy from the conqueror's kingdom may seduce the wild tribes, with prospects of plunder and power, to devastate the enemy's country.⁶³ Or they may create a division between the king and the commanders of the army, and bring about the death of the commander-in-chief.⁶³ ⁶⁴

59 Bk. XI, ch. 1. 4

60 Bk. XIII, 2.

61 For details see *Ar. Śāś.*, Bk. XIII, 2. 4-47

62 Bk. XIII, 3. 47

63 Bk. XII, ch. 3.

9. The conqueror's spies residing as traders in the enemy's forts and as householder-spies might bring about the destruction of the enemy's sources of supply, stores and granaries.⁶⁴

10. Lastly, they encouraged their army and frightened the enemy ranks. This was often done by soothsayers and astrologers who were, to all intents and purposes, spies of the conqueror. They described heaven as their goal and hell as the goal of the enemy.

It is further prescribed that in meeting his spies, the king should be well armed, as he should meet them only at night. Dishonest and misbehaving spies were subject to punishment. But true and honest officials were protected during the period of their active service. In this way Kautālyā speaks of a number of spies in different disguises and professions who were entrusted with onerous responsibilities and obligations and on whose work rested the weal or woe of the conqueror's kingdom. The description shows an elaborate network of the spy system.

In the post-Kautālyān period the old institution worked regularly. In the *Mudrārākṣasa* there is mention of an elaborate system of espionage.⁶⁵ In Kālidāsa's works we meet with the cāra in several places. The Parivrājaka in the *Mālavikāgnimitra* shows the existence of female spies, as was noticed in the Kautālyā. In the Purāṇas⁶⁶ where polity is dealt with, and also in law-books like those of Brhaspati,⁶⁷ Manu⁶⁸

64 *Ibid.*, ch. 4.

65 See, for instance, Act II.

66 *Matsya P.*, ch. 222. The spy chosen must be a linguist according to this Purāṇa. *Padma*, III, 216-29.

67 I. 46-8.

68 VII. 154: IX. 256, 261 and 298.

time of composition. This manuscript of the Hariharacaturanga is divided into eight books. The first four deal with the fourfold force in the order of elephants, chariots, horses and infantry. While those sections on elephants and horses occupy nearly 90 pages respectively, the information under the headings of chariots and infantry is meagre and occupies about four pages in the manuscript. The last four books deal respectively with dhanurvēda, rājanīti, dhanurvidyā and krīdayuddha. (This last is a period of training or apprenticeship after the period of study is over). In the opening lines of Book V the author expresses his indebtedness to previous works on the Dhanurvēda and in this connexion mentions four works—the Auśanasa Samhitā, Vīracintāmaṇi, Kodaṇḍacaturbhuja and Śārasaṅgraham, all of which are probably lost to-day. Towards the end of the sixth book, another work, called *Jayacintāmaṇi* is referred to. It is said to be a work bearing on astronomy and astrology, and the king is advised therein to set out on an expedition at an auspicious time.

Vīramitrodaya Lakṣaṇaprakāśa is by Mitramiśra, son and grandson respectively of Parasurāma Miśra and Hamsapaṇḍita. It was composed at the instance of king Vīrasimha, the son of Madhukarasāha and the grandson of king Pratāparudra. (The Chowkhamba Sanskrit Series, Benares, 1916). It is a compilation of material from different literary works which were authoritative during the 16th century, when the author flourished. In dealing with weapons of war and the threefold forces of elephants, horses and infantry, it has drawn rich and valuable material from the following works, some of which are now not traceable, others have been printed,

and some are still in manuscript. The MSS. referred to and still available are:—

1. Rājaviṇaya (Jammu and Kashmir Library).
2. Siddhāntaśekhara by Śrīpati.
3. Traiyambika Dhanurvēda (also named Isāṇa saṁhitā), said to be available in Orissa.
4. Vīracintāmaṇi Dhanurvēda (noticed in Rājēndralal Mitra's catalogue).
5. Parāśāra Saṁhitā, available in the Oriental Manuscripts Library, Madras.
6. Śālihotram (also named Aśvaśāstra), available in the Oriental Manuscripts Library, Madras.
7. Gaṇa Aśvāyurveda Do.

The following are the manuscripts not traceable and probably lost:—

1. Auśanasa Dhanurvēda as narrated by Śukra to Jamadagni.
2. Kalhaṇa's Aśvasārasamuccaya which refers to Śālihotram.
3. Bhōja's Lohārṇava.
4. Khadga Kōśa.
5. Lōharatnākara.
6. Bṛhaspati Saṁhitā.
7. Hastihṛdayaprabandha.
8. Vaidyaka tantra.

The following are published:—

1. Viṣṇusmṛti.
2. Varāhasaṁhitā (the same as Varāhamihira's Bṛhatsaṁhitā).
3. Pālakāpya (printed as Hastyāyurvēda), (Poona).

4. Jayadēva (datta) Aśvāyurvēda (printed in 1886
—Asiatic Society of Bengal as Aśvavaidyaka.)
5. Nakula, Aśvaśāstra, Do.
6. Nakula, Aśvaśikṣita, Do.
7. Viṣṇudharmottara Purāṇa, (Bombay).

APPENDIX II

FLAGS IN ANCIENT INDIA

The origin and use of flags can be traced to the earliest Indian literature, the Ṛg Veda Samhitā. The term *dhvaja* occurs twice in this Veda.¹ Besides *dhvaja*, we meet with a good number of expressions for a banner in Vedic literature. These are *Akra*,² *Kṛtadhvaja*,³ *Ketu*,⁴ *Br̥hatketu*,⁵ *Sahasraketu*.⁶ It appears that the Vedic host aimed their arrows at the banners of the enemy. The idea was that once the banner was captured, or struck, a claim was made for success in the battle over the enemy. *Ketu* was a pennon small flag as contrasted with *Br̥hatketu* or the big flag. *Sahasraketu* may be a thousand flags or it may be interpreted as a knight who had brought under control a thousand flags of enemies. *Ketu* by itself may mean a hero or a chief. We are told that banners and drums were counted among the insignia of ancient Vedic kings. This tradition is seen in the Atharva Veda which has an unmistakable reference to a flag with the device of the *Sūrya* (the Sun God).

The coupling of drums with banners is indeed significant. The drum represents music. It may be the

1 VII. 85.2: X. 103.11 (*Vedic Index*, I, p. 406).

2 I. 143.7: 3.1.12.

3 7.8.3.2.

4 I. 27.12.

5 V. 8.2.

6 I. 119.1.

music of the festival and festivities; or it may be war music. For the drum was used in those days for both purposes. So one has to infer that banners were used not only for military purposes but also as decoration on festive occasions. We are concerned here with the military use of the flag. It was at once a symbol and an emblem. It was not peculiar to the Indian nation. Every ancient nation, e.g. the Egyptian, Assyrian, Greek and Roman, had its own standards in different colours and devices. Every modern nation possesses its own flag. Britain is proud of her Union Jack and is prepared to stake its all for keeping it unimpaired throughout the British Empire. Turning to ancient India we find that there was no common flag in the sense in which we understand to-day the term 'national'. 'There were a number of flags and the number depended upon the number of heroes or leaders in war. Every leader had his own insignia to distinguish one division from the other. This device avoided confusion in the ranks both during the march of an army and in action in the battle-field.'⁷ This is much in evidence in the epic *Mahābhārata*. In the battle-field of Kurukṣetra, one could see a number of flags. The following are some of the flags which distinguished the Pāṇḍava and the Kaurava heroes in that historic battle-field. The expressions standing for flags and banners in the epics were dhvaja, ketu and patāka.⁸ In the Droṇa Parva of the *Mahābhārata* to a question put by Dhṛtarāṣṭra, Sañjaya reports about the various flags and banners employed by the Kurus and the Pāṇḍavas. One full chapter (105)

7 E. W. Hopkins, *JAOS.*, 13, pp. 243 ff.

8 *Mhb.*, I. 63.17: *Rāma*. II. 67.26.

is devoted to it. Let us analyse it under the following heads:—

<i>The name of the hero.</i>	<i>The Flag.</i>
Arjuna ..	The Kapidhvaja or the flag with the figure of Hanumān (monkey) with monkey's face and a long tail, creating terror in the rank and file of the enemy (Cf. Ch. 85.4).
Aśvatthāma ..	Simhalāngūlam or the flag with the figure of the tail of a lion, radiating, golden in colour, and affording delight to the Kurus.
Karṇa ..	Hastikakṣaya—golden, and adorned with festoons and garlands flying aloft in the air.
Kṛpā ..	Gōvṛṣa—a representation of the bull. This is the device also of Śiva.
Vṛṣasēna ..	Mayūra—the device of a peacock. This is also the emblem of god Subrahmaṇya.
Śalya, king of Madras.	Sītadvaja, auspicious and radiant.
Jayadratha or Sindhurāja.	Varāha or the boar emblem, white in colour. In the chariot adorned with this silvery flag, Jayadratha shone like Pūṣan of old in the Devāsura wars.
Bhūriśravas, the son of Sōmadatta.	The Yūpa flag—shone like the sun with the moon therein. It looked just like the yūpa in the Rājasūya sacrifice.

<i>The name of the hero.</i>	<i>The Flag.</i>
Śala	.. The elephant standard white in colour—resplendent just like the flag of Indra, the king of gods.
Duryodhana	.. The serpent (Nāga) flag set with gold and gems.
Bhīṣma	.. Tāladhvaja: Cognisance of a palmyra tree.
Other references to flags of equally great heroes who took part in the Great War are found here and there.	
Ghaṭotkaca	.. Cakradhvaja or the device of a chariot wheel (Droṇa P. ch. 23.76). Later on the emblem of eagle is said to have been his standard (<i>Ibid.</i> 91).
Droṇācārya	.. His was a representation of Kamaṇḍalu covered by deer-skin (<i>Ibid.</i> 83).
Bhīmasena	.. Simhadhvaja or the lion standard. The eyes were set with diamonds (<i>Ibid.</i> 84).
Yudhiṣṭhira	.. The Sōma device—the moon resplendent with all stars and planets (<i>Ibid.</i> 85).
Nakula	... Śarabhadhvaja—its back being gold but terrific in appearance (<i>Ibid.</i> 87).
Sahadēva	.. The Hamsa or swan emblem with bells and festoons terrifying the enemy (<i>Ibid.</i> 88).
Abhimanyu	.. Śārṅgapakṣī dhvaja—golden in colour (<i>Ibid.</i> 90).

*The name of
the hero.*

The Flag.

The Paurava
king.

Cognisance of a horn.

The Kalinga
king.

Cognisance of Agni or fire.

It is said that in vanquishing Nila, Aśvatthāma cut off the bow, *dhvaja* and umbrella of the enemy by the three sharp *balla* instruments (Droṇa P. ch. 31.23). This shows that even in the epic period pulling down the flags in battle amounted to defeating the foe.

In the *Rāmāyaṇa* we hear of the standard of Bharata containing the emblem of a Kovidāra tree. Even gods had their own streamers flying. Animals figure largely as emblems of these gods. Śiva's flag had the device of a bull,⁹ Viṣṇu's the device of Garuḍa or an eagle,¹⁰ Indra's the emblem of the sword, Kāma's the device of fish (*makaradhvaja*).

Reference to flags of different kinds is found in the *Kalpataru*, Hemacandra's work, *Kriyāsāra*, *Pratiṣṭhāsāra saṅgraha*, *Sūta Samhitā*, and *Yuktikalpataru* and other works.¹¹

That every *vyūha* of the Mauryan army was distinguished by the device of *dhvajās* and *patākas*, besides the special musical instruments like *turya* is evident from the *Arthaśāstra* of Kauṭilya. It is said that these different divisions had their respective flags and banners whether they were in camp, in

9 *Br. Purāṇa*, III. 3.79.

10 *Garuḍadhvaja*.

11 See in this connexion an article on 'Flags in Ancient India' by H. A. Talcherkar, *Modern Review*, August 1924.

march or in active warfare.¹² It is not possible to show whether *dhvajās* and *patākas* connoted the same meaning of flags and banners or they stood for different varieties of standards. The fact that Kauṭalya uses the two terms together raises a doubt that *dhvaja* was different from a *patāka*. *Patākas* were possibly festoons which were a feature and adornment of an army and those were hanging in rows between two points of the army. The *patākas* were such an essential feature of the army in later times that the army came to be designated as *Patākinī* by writers like Kālidāsa.¹³ Later on in suggesting remedies against the injuries of one's own army,¹⁴ Kauṭalya again refers to the trumpets, *dhvaja* and *patāka*, and suggests the preparation of a certain medicinal mixture which, when besmeared over these flags and banners, would tend to remove the poison at the very look, if their poisoning were in any way suspected. The *dhvaja* was evidently a flag attached to a pole on the war chariot.¹⁵ It was so much valued that the army became designated in the *Mahābhārata*, *dhvajani* and in Tamil *koḍiccenai*.¹⁶

12 Bk. II, ch. 33.

The same idea is repeated in a later chapter dealing with *vyūhas* in general (Bk. X, ch. 6). Each *vyūha* had its own *tūrya-ghoṣa* and ensigns.

13 *Raghu*. IV, 82.

14 Bk. 14, ch. 4.

15 Koḍitter of Tamil literature occurs twice in *Śilappadikāram* (XXII. 109; XXVII. 152).

16 *Śilap*. XXVI. 152 comm. Again in the *Perumkadai* the term Koḍippadai occurs twice on pp. 139 and 369 (Swaminatha Aiyer ed. (1924)). Here the term stands for the vanguard of the army as distinguished from the rear-guard which goes by the name *Kūlai*. (கூழை)

It is interesting that different designs of flags and banners have been wonderfully carved in wood and stone and are carefully preserved at Sānchi, Bhuvaneśvara and Ajanta caves. A look at the wood cuts Nos. 164 and 165 of Cunningham's Bhilsa Topes (p. 215) will demonstrate a beautiful carving of a flag as an oblong piece of cloth with or without diagonal stripes. A number of flag staffs are also seen. The use of flags meant also the use of the staffs on whose top the flag was generally let flown. The staffs were made of different wood, with a bias in favour of bamboo.

The use of flags and banners was not a peculiar feature of the North Indians. The early Tamil kings of South India had their own standards. The emblem of their crests served as the sign of their banners. We hear of *kayal* (fish), *śilai* (bow) and *puli* (tiger) flag.¹⁷ In the Śinnamanur plates of Rājasimha Pāṇḍya, the Pāṇḍyan is designated as *mīnadhvaḥa*. The expression *Pulikkodiyon* (he who possesses the tiger flag) occurs again in the *Perumtogaī* (1200). Besides the streamers attached to the chariots, the flags were also carried on elephants in Tamil warfare. Reference is made to this in several places in Tamil literary works, especially the *Puraṇānūru* (st. 9 and 38). Lofty standards of varied colours were placed on young war elephants which constituted an army. It is said that the white coloured

17. அடுத்த லொருவகிற் பரவது மெங்கோன்
 ரொடுகழற் கொடுபூட் பகட்டுழின் பார்ப்பிற்
 கயலொடு கலந்த சிலையுடைக் கொடுவரிப்
 புயலுறழ் தடக்கைப் போர்வே லச்சுதன்
 தொன் றுமுதிர் கடலுலக முழுதுடன்
 ஒன்றுபு திகிரி யுருட்டுவோ னெனவே

M. Raghava Aiyangar; *Perumtogaī*, 15.

flag was a sign of victory.¹⁸ That the flag signified victory in war is also seen in other works like the *Maduraikkāñji*,¹⁹ and *Malaipaḍukaḍām*.²⁰ Thus it was the South Indian practice to use the same emblem for both their seals and standards. That this was followed by later kings of South Indian dynasties can be seen from the Pallavas, Chālukyas and Vijayanagar monarchs. The Pallavas had the Vṛṣabhadhvaja or the Bull Standard. Boar flags were used both by the Chālukyas and the Vijayanagar kings.

Barring some of the seals which have the lion emblem, the Pallava cognisance was the bull, as testified to us by epigraphy and literature. In the inscriptions the Pallava king Rājasimha has the significant attributes Śrī Vṛṣabhadarpa and Rṣabha lāñcana. Parameśvara-varman I is styled as Vṛṣāṅka and Nandivarman Śākavaraketana. Of all the evidences the last is important for our purpose. Śākavaraketana is one who shines by his bull standard. This proves that the device for the seal and the flag was common also to the

18. விசய வெண் கொடி. *Puram* 362. l. 5.

விசயம் வெல்கொடி புயரி

Mullai, 91.

வான்றோய் வெல்கொடி

Padirru, 69. l. 1.

19. வேறுபல் பெயர வாரெயில் கொளக்கொள

நாடோ நெடுத்த நலம்பெறு புனைகொடி

நீரொலித்தன்ன நிலவுவேற் றுனையொடு

புலவுப்படக் கொன்று மிடைதோ லோட்டிப்

புகழ்செய் தெடுத்த விறல்சா னன்கொடி

கன்னின் கனிநவில் கொடிபொடு நன்பல

பல்வேறு குழுஉக்கொடி. 12தாகை நிலைஇப்

பெருவரை மருங்கி னருவியி னுடங்க

Madurai, ll. 367-74.

20. மலைநீர், வென்றெழு கொடியிற்

தோன்றும்

ll. 581-2.

Pallava and this was the bull. As if to corroborate this, in the *Prabandham*, Tirumangai Mannan expostulates the Pallava monarch

viḍai ver koḍi vērpadaḍai mun uyartta

(*Periya Tirumoli*, ii, 9.)

an unquestionable reference to the victory-giving bull flag.

When we come to the Chālukyas we find the device on their crest the *varāha* or boar. Their flag was known as *pāḷidhvaja*. Vinayāditya Satyāśraya won this decoration of *pāḷidhvaja* after vanquishing a northern king and subduing the Ceylon contemporary to the rank of a tributary ruler.²¹ What the *pāḷidhvaja* means is still a mystery. The explanation offered by J. F. Fleet as the banner of the sword-edge²² does not appear to be satisfactory.

That the Vijayanagar kings used the boar crest and boar standard is also evident from the inscriptions and the Local Records. It is said in the chronicle of chiefs of Naḍimidoddi Pāḷayam that king Kṛṣṇadēvarāya in his expedition against Gulburga beat the drum of victory and set up the vṛṣabha dhvaja.²³

The Marathas appear to have had two banners²⁴ Jaripaṭkā and Bhagavā zeṇḍā. It is doubtful whether

21 See the Vakkaleri Plates of Kīrtivarman II—*Ep. Ind.*, Vol. V, pp. 201-203.

22 *Ind. Ant.*, 1878, pp. 111 and 245.

23 Local Records, Vol. XXXIX, p. 12.

24 P. K. Gode's paper in *I.H.Q.*, Vol. XVI, pp. 40-47. 'Aftagir was conferred by Shivaji on his generals and officers of lesser rank as early as the seventeenth century. Similarly the honour of carrying *Jari Patāka*, the golden standard conferred on distinguished

both of them were used for military purposes. The latter, Bhagavā zenḍā, has been identified with Pārijāta-dhvaja attributed in literature to Sāmbhāji.

Maratha generals, was also quite in accord with the Mughal custom.'
Surendranath Sen: *Administrative System of the Marathas* (1925),
p. 639,

APPENDIX III

WAR MUSIC

War musical instruments are mentioned from the R̥g Veda Samhitā onwards. It proves that music was a feature of ancient Indian warfare. There were musical instruments which were intended for use only on sacrificial and festive occasions. There were others which were used in both war and peace like *dundubhi*. There were still others which were used only for war purposes. We are concerned here with the second and third categories. *Dundubhi* was a kettle-drum. It was also the earth drum, made by digging a hole in the ground and covering it with a hide.¹ It was employed in religious rites and ceremonies. We meet with the expression *bhūmi dundubhi* in the Samhitās² and the Brāhmaṇas.³ From this one has to infer that *dundubhi* might be of different kinds. And *bhūmi dundubhi* was a later invention of the Aryan peoples.

In the R̥g Veda Samhitā we meet again with another instrument Bakura with its variations as we conjecture Bakura and Bekura. In the passage in which it occurs⁴ it was possibly an instrument for war purposes. It is said that in the course of an expedition against the Dasyus, the Aśvins blew this musical instrument to help their army against their enemies. From the circum-

1 R.V. I, 28.5; A.V. V. 20.1.

2 Taitt., S. VII, 5.9.3.

3 Pañcavimśa Br. V. 5.19.

4 I. 117.21.

stances in which this is mentioned one has to take it that this Bakura was solely employed for war purposes.

If we pass on to the Epic period we find different varieties of musical instruments. E. W. Hopkins who has made some study of these instruments⁵ seems to think that *bherī* may not be cymbals. *Bherī* is certainly a special sort of drum. There was also a *mahābherī*. The old *duṇḍubhī* was there and it was often accompanied by the *bherī*. The *bherī* was sounded by beating, and the beating of the *bherī* was a call to arms.⁶ Other varieties of the drum mentioned in the epic are *paṇava*, *krakaca*, *ānaka* (beaten at one end), *mahānaka*, *Peśī* (*kāhalā*), *puṣkara* and *paṭaha*. There is a doubt whether *krakaca* said to be *jayamangala* by the commentator can come under the category of drums.⁷

The same holds true of *goṣaṇḍikas*, probably horn instruments. In addition to the drums and their deafening noise in the battle-field, we find a large use of shells (*śankha*) which served apparently as trumpeting instruments. Among the *śankhas* there were different kinds. As every warrior was distinguished by his own respective flag, he had his own conch which he blew as a war cry at the commencement of the battle, during the actual operations and after a decisive victory. The names of conches used are interesting⁸—

Kṛṣṇa	Pāñcajanya
Yudhiṣṭhira	Anantavijaya
Bhīma	Paundra
Arjuna	Devadatta

5 JAOS, XIII, pp. 318 ff.

6 Mhb. 11.62: VI. 17.16; Rāma. VI. 34.27.

7 Ibid., VII. 39.31; VI. 51.23; 99.17-19; 43.7-8; Gita, I. 18.

8 Ibid., V. 51.24-26.

Nakula

Sughoṣa

Sahadeva

Maṇipuṣpaka

There were besides, the blowing of horn (govīṣāṇika), gomuka and turya which may represent the trumpets of war. In Bk. IV, ch. 4 of the Arthaśāstra, Kauṭalya's reference to turya or trumpets along with flags has been already pointed out. Drums and trumpets largely figure as we go on in the march of history. The use of conch-shells becomes rarer until its use was once for all restricted to temple services and other rites and ceremonies.

Even among the war instruments relating to music in the epic period we find a distinction between the music in the field and music in the camp. In the camp the melodies are softened and the warriors are 'greeted by the milder notes of the lyre.'⁹ This incidentally shows the advance made by epic peoples and their keen artistic sense. The primitive and simple musical style has been replaced by the mature and civilised style. The soldiers enjoyed good and sweet music after the hard and harsh music of the battlefield. Mṛdanga and paṇava were more for the use of the camp than for the field.¹⁰ Nanda and upanandakas, special kinds of mṛdanga were played upon by mechanical contrivance so as to produce a joyous note.¹¹

Tamil literature contains many references to war musical instruments. Some of them are koḍumpaṛai, muraśu, pāṇḍil, neḍuvayir, and mayirkkaṇ muraśu. Muraśu is said to be of three kinds of which there was the vīra muraśu, used in war and victory.¹² There is a

9 Hopkins: op. cit., p. 321. 10 *Mhb.* VI. 99.18: VII. 39.31.

11 *Mhb.* VII. 23.86.

12 *Śūlap.* p. 118. *Puram* 58.

description of vīra muraśu in Puram 50. Mayirkkan muraśu is the drum covered over with the hairy skin of the dead bull which had vanquished a tiger when attacked. This was beaten when head offerings were made by warriors at the altar of the bhūta.¹³ In the battle by Śenguttuvan with the northern kings it is said that the muraśu thundered along with leather kodumparai, mayirkkan muraśu, neḍuvayir and paṇḍil. The last is perhaps cymbals.¹⁴ All these made a hell of noise so as to enthuse warriors to fight with redoubled vigour and energy. A similar idea is afforded by a stanza in Villi-puttūrār Mahābhāratam.

முரசு கரடிகை கிணை துடி பெருமர முருடு படுபறை
முதலிய கருவிக
ளரச வரிவளை கொடுவயி ரெழுமுது வரவவிரு
துகண் முதலிய கருவிக
ளுரைசெய் கருவிகண் முழுவது மெழுவதை யுலக
முடிவுற வுகன்று திமிலெழு
கரைசெய் கடலென வெறிவளி யெனமிசை கஞலி
யுருமெறி கனமென வதிரவே—கன்ன பருவம், 24.

Here the instruments mentioned are muraśu, karaḍikai, kiṇai, tuḍi, perumaram, muruḍu, paṭuparai. Kiṇai seems to be beaten on one side only in the light of a line in Purānānūru.¹⁵ Karaḍikai is perhaps Sanskrit Krakaca. Paṭuparai and Kodumparai may mean the same thing. Neḍuvayir is a long horn instrument. Vāl-vaḷai and varivaḷai are varieties of the conch. The instruments like Muruḍu and lute must be more for the camp than for the field.

13 *Śilap.* V. 76-88: see also Maduraikkāñji, ll. 732-3.

14 *Ibid.*, XXVI. ll. 193-196.

15 392. 4. 5.

APPENDIX IV

CURIOSITIES OF WAR

1. One practice among the primitive Tamil tribes was the worship on the eve of an expedition of the War Goddess who was known as Korṟavai. This goddess is propitiated with sacrificial offerings, often accompanied by dance and song. In the *Śilappadikāram*, the tribe Eiyṉar whose profession was cattle-lifting invoked the aid of Korṟavai for the success of their expedition to the neighbouring village or town, and took a vow to offer sacrifices at the successful termination of their expedition. It was their belief that this goddess marched in front of their army leading them stage by stage to ultimate victory.¹ The way in which she is invoked is interesting.

அடிக்கழுத்தி னெடுஞ்சிரத்தை அரிவ ராலோ
அரிந்த சிரம் அணங்கிண்கைக் கொடுப்ப ராலோ
கொடுத்த சிரம் கொற்றவையைப் பரவு மாலோ
குறையுடலுங் கும்பிட்டு நிற்கு மாலோ.

Kalingattupparaṇi, 97. Cp. *Śila*. V. ll. 76-88. The Korṟavai was the counterpart of the Sanskrit Durgā whose help was sought by special prayers by Arjuna, the Pāṇḍava, on the eve of the Great Battle with the Kurus.²

It was similarly believed that a prayer to Durgā meant undoubted and even unlimited victory to one's arms. It is striking to note that Iḷango-Aḍigaḷ does not

1 *Śilap.* canto XII.

2 See Dikṣitar, *The Lalita Cult*, p. 62.

refer to Senguttuvan's prayer to Koravai when he set out to the North against its kings. On the other hand it is stated that the blessings came from the local Śiva and Viṣṇu temples which he solemnly accepted. Does this show that the worship of Koravai was confined to primitive tribes and not to a civilised community to which Senguttuvan belonged? Perhaps it does.

2. The consultation of auguries is another feature of the wars in ancient India. Auguries consisted of *śakunam* and *nimittam*.³ In this connection a sūtra of the Tolkāppiyam is very significant.⁴ We have a series of *nimittams* here. The first is *nāl nimittam* or the choice of a particular day auspicious for starting on an expedition.⁵ The astrologer was an important official of the state whom the king often consulted. Secondly from right to left, or from left to right, seeing certain birds, hearing the voice of others were sure indications of the success or otherwise of the undertaking. References to this omen are extensively met with both in early and later Tamil literature.⁶ Among the birds, Kāri (sans. Bharadvāja) is referred to in the *Chintāmani* in connection with the cattle-lifting.⁷ A third *nimittam* was *viricciyorttal* (sans. upaśruti). This is a statement made by a third person unconcerned with the actual decision to be taken. In common usage it is called in Tamil land வாய்ச்சொல்.⁸ Then we have what

3 *Purapporul*, sts. 13 and 22.

4 *Purattinaiyil*, 36.

5 See for instance *Śilap.* V. ll. 91-92.

6 See e.g. *Puram* 20.

7 St. 420.

8 See also *Mullaippāṭṭu*, 11.

is called *orihkural* or the howling of a beast, particularly a jackal. It may be also *kalutukural* or the howl of a devil. The fifth was the fall of headless body or bodies in the orbit of the sun (*veñcuḍar maṇḍilam*). The sixth was the sight of a hole in that *maṇḍilam*. The seventh was the appearance of the moon in the day-light. The last three are rare phenomena cognizable by the senses only. *Kālidāsa*⁹ refers to adverse winds on the march of an army. The auspicious day was also fixed by the place occupied at a particular time by the planets.^{9a} The following lines of the *Kalingattupparani* throw interesting light on this subject of omens.

மதக்கரி மருப்பிற மதம்புலரு மாலோ
 மடப்பிடி மருப்பெழ மதம்பொழியு மாலோ
 கதிர்ச்சடர் விளக்கொளி கறுத்தெரியு மாலோ
 காலமுகில் செங்குருதி காலவரு மாலோ. 209
 வார்முர சிருந்துவயி தேயதிரு மாலோ
 வந்திரவில் இந்திரவில் வானிலிடு மாலோ
 ஊர்மனையில் ஊமனெழ ஓரியழு மாலோ
 ஓமவெரி யீமவெரி போலெரியு மாலோ. 210
 பூவியலு மாலைகள் புலால்சமுழ மாலோ
 பொன்செய்மணி மாலையொளி போயொழியு மாலோ
 ஓவிய மெலாழுடல் வியர்ப்பவரு மாலோ
 ஊறுபுனல் றெங்குருதி நாறவரு மாலோ. 224

3. *Virakkal*. The great warrior who stood to the last and won the laurel of victory did not go unrecognised. To perpetuate his memory it was the

9 तस्य जातु मरुतः प्रतीपगा वर्त्मसु ध्वजतरुप्रमाथिनः ।

चिक्लिशुर्भूशतया वरूथिनीमुत्तटा इव नदीरयाः स्थली ॥ XI. 58

लक्ष्यते स तदनन्तरं रविः बद्धभीमपरिवेषमण्डलः ।

वैनतेयशमितस्य भोगिनः भोगवेष्टित इव च्युतो मणिः ॥ *Ibid.* 59

Tamil custom to instal a stone called *virakkal* with an inscription containing his name and heroic deeds. Sometimes the hero stone became an object of veneration by the public. The *Kural-venba* has it:

என்னைமுன் நில்லன்மீன் தெவ்வீர் பலரென்னை
முன்னின்று கல்நின் றவர் (படைச்செருக்கு—1)

The *virakkal* is mentioned largely in epigraphy and is found throughout the districts of Anantapur, Cuddapah, Nilgiris, Coorg, etc.¹⁰ From the earliest extant Tamil literature, *Tolkāppiyam*, it appears there was a regular ceremonial attending the planting of the hero stone. Any stone and every stone was not to be used. Only stones appropriate for the occasion were selected. Then an auspicious hour was fixed to carve out an image and also the inscription thereon. The next stage was to get the stone bathed in sacred waters, being a purificatory ceremony. Then came the pleasant function of planting it at the suitable place already fixed. The last was to celebrate it as a deity, sometimes enclosing it in a building.

4. *Kāvanmaram*: It was a custom with ancient Tamil monarchs to rear a tree at the outskirts of their dominions, and to guard it with great care and zeal. The idea was that if the invading enemy would first attack this *Kāvanmaram*, and if this were felled down, the owner of the tree felt it a public shame as it amounted to vanquishing him.¹¹ The enemy king removed the tree to his kingdom and put it to different uses, one of which was to make out of the cut trunk a war drum.¹² The

10 *Aham.* 347, 11. 3-5: 127.

11 *Puram*, 23, 36, 57.

12 திரப்பூந் கடம்பின் கடியடை முழுமுதல் துமிய (பதிற். 11)
கடம்பறத் தியற்றிய வலம்படு வியன்பனை (பதிற். 17)
கடம்பறத் தியற்றிய பண்ணமை முரசு (அசே. 347)

Kāvanmaram was a symbol of sovereignty. It is said that Imayavaramban Neḍuñceralātan felled the Kadamba tree in an island which he captured. The idea of this Kāvanmaram may be traced back perhaps to the Pillar cult which may have been a part of the ancient Dravidian worship. As in ancient Crete the Tamils of South India attached value to the cult of the Pillar. It may be that the kings of the Tamil land attached religious significance to this Kāvanmaram, and hedged it with divinity.

5. Another peculiarity of the Tamils was to erect images of women with balls in their hands at the entrance gates of the king's palace:

செருப்புகள் நெடுத்த சேணுயர் நெடுக்கொடி

வரிப்புனை பந்தொடு பாலை தூங்கப்

பொருநர்த் தேய்த்த போரு வாயில் (திருமுருகு. 67—69)

The idea was to treat the enemy kings as members of the weaker sex. The conquering king felt that he was superior to all the princes. If the latter had the courage to attack him they had to cut off the cords with which the image was fastened, and this amounted to a declaration of war. It was one method to discard and despise the enemy as such.

6. If the men of the Tamil land were heroes, their women were heroines. There are interesting passages in the *Purāṇānūru* where poetesses have sung in praise of the heroism of Tamil women, mothers who had given birth to heroic sons. Okkūrmāsāttiṃyār, a poetess, praises a certain lady who gave birth to only one son and who sent him to the field of battle when there was the country's call for it. Born in a family of heroes, this lady dresses the hair of her only son (it may be noted here that the wearing of tuft was an ancient

Tamil practice) and gives him the armour to get ready for action in the field of battle. She encourages him by saying that both his father and grandfather gave up their lives heroically in battle, and it was but proper that he a young fellow should follow the example of his dear and near forbears.¹³

This may be contrasted with another verse where a heroic mother heard the disquieting news that her son lost his courage in action and had fled in fear. If it were true, she expressed that she should cut off her breasts that had fed him with milk. With this determination she entered the battle-field with a sword in her hand and went on searching for her fallen son. When she saw her son's body cut in twain, she felt much more happy than when she gave birth to him.

மீனுண் கொக்கின் தூவி யன்ன

வானரைக் கட்தன் முதியோள் சிறுவன்

களிமெறிந்து பட்டன னென்னு முவகை

யின்ற ஞான்றினும் பெரிதே கண்ணீர்

நோன்கழை துயல்வநம் வெதிரந்து

வான்பெயத் தூங்கிய சிசரினும் பல்லை

Puram 277.

When a certain mother heard that her son threw his spear over the enemy's elephant but could not take it back, and so unarmed, he had to retreat from the field, she got distressed and despised her bowels which yielded that son. She felt that her son had let down the honour of her family.

வாதுவல் வயிறே வாதுவல் வயிறே

நோவ லத்தை நின்னீன் றன்னே

பொருந்தா மன்னர் அருஞ்சம முருக்கி

அக்களத் தொழிதல் செல்லாய் மிக்க

புகர்முதக் குஞ்சர மெறிந்த எல்கம்
அதன்முகத் தொழிய நீபோந் தனையே.

Tol. Porul. 24. Comm.

Equally interesting is the stanza of the poetess Ponmuḍiyār who sets out the duties of parents, son and king.

ஈன்று புறந்தருதல் என்றலைக் கடனே
சான் றீறு னுக்குதல் தந்தைக்குக் கடனே
வேல்வடித்துக் கொடுத்தல் கொல்லற்குக் கடனே
நன்னடை நல்கல் வேந்தற்குக் கடனே
ஒளிநுவலாள் அருஞ்சம முருக்கிக்

களிறெறிந்து பெயர்தல காணாக்குக் கடனே. *Puram 312.*

Sometimes heroic wives who heard of their husbands' death in the field were unwilling to survive them. They went to the scene of action in search of the dead bodies of their husbands. When they found them out they embraced them and sought voluntary death by entering the funeral pyre.¹⁴

7. There are other curiosities which marked ancient Tamil warfare. One was the heroic impulse which animated the wounded soldier. Normally we would expect him to get treated and nursed. But the Tamil soldier who fell in battle badly wounded, refused to undergo any treatment for his wounds. He preferred to make his wound more and more ulcerous and thereby he invoked death. He did not like the idea of living after having been beaten to death in the battle. This is explained in the *Purattinaiyiyal* of the *Tolkāppiyam* and goes by the name of *Maṛakkāñci* being one of the ten sub-divisions of *Anparkāñci* of the *Kāñcitturai*.

14 See for details the article on *Virāṭṭāyamar* in M. Raghava Aiyangar's *Āṛāccittogudi*, pp. 167-177.

8. *Puram* consists of seven *tiṇais* or themes, and of these *veṭci*, *vañci*, *uliñjai*, *tumbai* and *vāhai* are related to war efforts on the part of the ancient Tamils. Later on the *tiṇais* became twelve. It is *veṭci* when a chieftain sends out his troops to seize the cattle of the neighbouring chief and to distribute the prize among the villagers and others. Here it was usual for the conquering chief to wear *veṭci* garland. This is the explanation of the theme given by *Tolkāppiyānar*. Recovering the cattle from the enemy is said to be *Karandai* where, as a consequence of the success, the *Karandai* flower was worn. It is really curious that the Tamils attached significance to the different flowers representing various stages of an expedition. In fact the whole of the *Purapporul veṇbāmālai* of the 7th century A.D. deals with these various themes in detail, though by this age the mode of wars in general in South India had been considerably changed. At the best the *Purapporul Veṇbāmālai* can be said to record the old tradition rather than the contemporary usage.

BOOKS CONSULTED

1. ORIGINAL SOURCES.

Agni Purāṇa (Ānandāśrama series).

Aitareya Brāhmaṇa (Asiatic Society of Bengal).

Amarakośa.

Āpastamba Dharmasūtra (Bombay Sans. Series).

Arthaśāstra of Kauṭilya (Trivandrum San. Series).

Āśvalāyana Gṛhya Sūtra.

Atharva Veda Samhitā.

Do.

Translation by W. D. Whitney
(Harvard Series).

Auśanasa Dhanurveda.

Bārhaspatya Arthaśāstra ed. F. W. Thomas.

Bhāgavata Purāṇa (Kumbakonam ed.).

Brahmāṇḍa Purāṇa (Bombay).

Bṛhaspati Samhitā (S. B. E.).

Baudhāyana Dharma Sūtra (Mysore Oriental Series).

Catuh-Śatikā of Āryadeva.

Corpus Inscriptionum Indicarum III: Gupta Inscriptions.

Daśakumāracarita.

Devicandragupta.

Devi Bhāgavata.

Gautama Smṛti (S.B.E.).

Harihara Caturāṅga.

Harivamśa.

Harṣacarita (ed.—Cowell and Thomas).

Hastyāyurveda.

Index to the Mahābhārata: Sorenson.

Inscriptions of Aśoka ed. Hultzsch.

The Jātakas ed. by E. B. Cowell.

Kāmandakanīṭisāra (Trivandrum San. Series).

Khazaiun-'l Futuh of Amir Khusrau ed. by Prof. M. Habib.

Koḍaṇḍamaṇḍana.

Kauṣītaki Brāhmaṇa (translation by A. B. Keith).

Laghvarhannīṭisāra of Hemacandra.

Lakṣaṇaprakāśa.

Laukikanyāya Saṅgraha (Pandit Series).

Mahābhārata (Kumbakonam ed.).

Mahāvamśa.

Mānavadharmasāstra (Bombay).

Mārkaṇḍeya Purāṇa.

Matsya Purāṇa (Ānandāśrama Series).

Maṭaṅgalilā (Trivandrum San. Series).

Do. translation by Edgerton.

Mānasollāsa of Someśvara.

Mudrārākṣasa (Bombay).

Nītiprakāśika of Vaiśampāyana.

Nītivākyāmṛta of Somadeva (Kāvyamāla Series).

Naiṣadha.

Padma Purāṇa.

Periplus—ed. by Schoff.

Pratijñāyugaṇḍharāyaṇa of Bhāsa (Trivandrum Series).

Pudukottai State Inscriptions.

Raghuvamśa of Kālidāsa.

Rājatarangini of Kalhaṇa (Bombay San. Series).

Rāmāyaṇa of Vālmīki (Kumbakonam ed.).

Raṇadīpikā—(Trivandrum San. Series).

R̥gveda Samhitā.

- Śakuntala of Kālidāsa.
 Śatapatha Brāhmaṇa (S.B.E.).
 Śārngadhara paddhati ed. Peterson.
 Śisūpālavadha of Magha.
 Śivatatvaratnākara (Madras).
 Śivavyāsadhanurveda.
 Śukranītisāra ed. by Oppert.
 Śūlapāṇi-Caturanga dīpika.
 Samarāṅgaṇa sūtradhāra of Bhoja (Gaekwad San.
 Series).
 Skanda Purāṇa.
 South Indian Inscriptions.
 Taittirīya Samhitā (Ānandāśrama Series).
 Uttararāma Carita.
 Vājasaneyī Samhitā (Bombay).
 Vāmana Purāṇa.
 Varāha Purāṇa.
 Vāyu Purāṇa (Ānandāśrama Series).
 Vāsiṣṭha Dhanurveda.
 Vāsiṣṭha Samhitā (S.B.E.).
 Vedic Index (Macdonell and Keith).
 Viṣṇudharmottara Purāṇa.
 Viṣṇu Smṛti (S.B.E.).
 Vikramaurvaśīya.
 Vaiśampāyana nīti ed. by Oppert.
 Yājñavalkya Smṛti (Bombay).
 Yogayātra of Varāhamihira.
 Yajurveda Samhitā.
 Yuktikalpataru of Bhoja (Cal. Oriental Series).

TAMIL SOURCES.

- Kalingattupparaṇi ed. by Kannaiya Naidu (1941).

Memoirs of Asiatic Society of Bengal, Calcutta.

Man in India.

New Review, Calcutta.

K. B. Pathak Commemoration Volume.

Sir C. R. Reddi Commemoration Volume.

Sen Tamil, Madura.

Woolner Commemoration Volume.

3. MODERN WORKS.

Aiyangar, S. Krishnaswami—(1) Sources of Vijayanagar History and (2) Contributions of South India to Indian Culture.

Aiyangar, K. V. Rangaswami—(1) Some Aspects of Ancient Indian Polity and (2) Rājadharmā.

Aiyangar, P. T. Srinivasa—History of the Tamils.

Aiyangar, M. Raghava—Peruntogai.

Abbe Dubois—Hindu manners, customs and ceremonies. Alberuni's India.

Ajanta Frescoes—India Society.

Ancient Khotan—M. Aurel Stein.

Bhandarkar, D. R.—Some Aspects of Ancient Indian Culture (1940).

Bannerji, P. N.—Public Administration in Ancient India.

Beal—Life of Hiuen Tsang.

Birdwood, Sir George—Industrial Arts of India.

Brooke, Stopford A.—A Discourse on War.

Broughton—Letters from a Maratha Camp.

Burns, C. D.—War.

Beni Prasad—The State in Ancient India.

Cunningham, A.—(1) Coins of Ancient India. (2) The Bhilsa Topes.

Cambridge History of India, Volume I.

- Clausewitz—The Art of War.
 Clarke—Medieval and Military Architecture.
 Chronicles of Froissart (Macmillan).
 Chakravarti, P. C.—The Art of War in Ancient India
 (Dacca University).
 W. Church—Marlborough.
 Coomaraswami, A. K.—Viśvakarma.
 Dikshitar, V. R. R.—Hindu Administrative Institutions.
 Do. The Mauryan Polity.
 Do. Studies in Tamil Literature and
 History.
 Do. Some Aspects of Vāyu Purāṇa.
 Date, G. T.—The Art of War in Ancient India (O.U.P.).
 Dharma, P. C.—The Rāmāyaṇa Polity.
 Elliot and Dowson—History of India.
 Edgerton—Pancatantra Reconstructed.
 Do. Indian and Oriental Armour.
 Glover, Edward—War, Sadism and Pacifism (Allen &
 Unwin).
 Farnell, L. R.:—The Higher Aspects of Greek Religion.
 Golikere—Through Wonderlands of the Universe.
 Giles, L.—The Art of War.
 Ghose, N.—Indian Literature and Culture Origins.
 Gopinatha Rao—Hindu Iconography.
 Gopalan, R.—History of the Pallavas of Kanchi.
 Gopal, M. H.—Mauryan Public Finance.
 Ghoshal, U. N.—Hindu Political Theories.
 Griffith—Specimens of Indian Poetry.
 Hall—The Ancient History of the Near East.
 Hildebrandt—Airships, Past and Present.
 How to prevent War—(Victor Gollanz, Ltd., London).
 Hopkins, E. W.—Ethics of India.

- Havell, E. B.—Indian Sculpture and Painting.
Hunter—Orissa.
Henry—Napoleon's War maxims.
Henderson—Science of War.
Indian Architecture (Oxford Press).
Irvine, W.—The Army of the Indian Moghuls.
James, W.—The Variety of Religious Experience
(Longmans 1908).
Jayaswal, K. P.—Hindu Polity.
 Do. Imperial History of India.
 Do. A History of India.
Jevons, F. B.—An Introduction to the History of Religion (6th ed.).
Krom N. T. and T. Van Erp—Borobudur.
Ludwig Bachhofer—Early Indian Sculpture.
Lassen—Indische Altertumskunde.
Law, N. N.—Interstate relations in Ancient India.
Law, B. C.—A History of Pali Literature.
Malory—Morte d' Arthur.
Mookerjee, R. K.—A History of Indian Shipping.
Monahan, F. J.—The Early History of Bengal (Oxford).
Murray, H. J. R.—A History of Chess.
McCrindle—Invasion of Alexander.
 Do. Fragments of Arrian and Megasthenes.
Mahalingam, T. V.—Society and Administration under
 Vijayanagar.
Morgan—Ancient Society.
Macdougall, W.—An Introduction to Social Philosophy
 (15th ed.).
Macdougall—Modern Warfare.
Macdonell, A. F.—Vedic Mythology.

- Nag, Kalidas—*Les Theories Diplomatiques de le Inde Ancienne.*
- Nilakanta Sastri, K. A.—*The Colas.*
- Oppert, G.—*On the Weapons etc. of the Hindus.*
- Oman, Charles—*A History of the Art of War in Middle Ages.*
- Perris, G. H.—*The War Traders (Chancery Lane Press).*
- Parker—*Ceylon.*
- Plato—*Laws.*
- Parmentier, A.—*Album Historique.*
- Ronaldshay—*A Bird's-eye View of India.*
- Robertson—*Disquisition.*
- Rapson—*A Catalogue of Indian Coins.*
- Risley—*Ethnographical Glossary.*
- Rice, Lewis—*Mysore Gazetteer.*
- Sarkar, Sir Jadunath—*Sivaji.*
- Saletore, B. A.—*Social and Political life in Vijayanagar Empire.*
- Sewell, Robert—*A Forgotten Empire.*
- Smith, V. A.—*A History of Fine Arts in India and Ceylon.*
- Smith, V. A.—*An Oxford History of India.*
- Senart—*Caste in India.*
- Siddhanta, N. K.—*The Heroic Age of India (Longmans 1929).*
- Sen, S. N.—*The Military system of the Marathas.*
- Tutorial History of Greece.*
- Tylor—*Anthropology.*
- Urwick, E. J.—*A Philosophy of Social Progress (Methuen, London) (1912).*
- Varthema—*Itinerary (Haklyut Society).*

Vincent, W.—The Commerce and Navigation of the Ancients.

Visvanatha, S. V.—International Law in Ancient India.

Watters—Yuan Chwang.

Warmington—A History of Ancient Geography.

Wheaton—Elements of International Law.

Winternitz, M.—A History of Indian Literature.

Woodworth, R. S.—Psychology (1930).

Wells, H. G.—The Outline of History.

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